

CA20N
LF
-R21

Government
Publications



REPORT OF THE
COMMISSIONER OF CROWN LANDS,
ONTARIO.

1879.

[Redacted]



REPORT
OF THE
Commissioner of Crown Lands
OF THE
PROVINCE OF ONTARIO
FOR THE YEAR
1879.

Printed by Order of the Legislative Assembly.



Toronto:
PRINTED BY C. BLACKETT ROBINSON, 5 JORDAN STREET.
1880.



Digitized by the Internet Archive
in 2022 with funding from
University of Toronto

<https://archive.org/details/31761115470023>

CONTENTS.

Commissioner's Report :—

	PAGE.
Crown Land Sales	v.
Clergy Land Sales	v.
Common School Land Sales	v.
Grammar School Land Sales.....	vi.
Collections and Revenue	vi.
Disbursements	vi.
Revenue Arising from Crown Timber.....	vi.
Free Grants	vi.
Crown Surveys	vi.
Municipal Surveys	vii.
Mineral Surveys....	vii.
Colonization Roads	vii.
General Observations—Sales	vii.
" Woods and Forests.....	viii.
" Mines and Minerals.....	xvi.
" Free Grants.....	xvii.

Appendices :—

Return of Officers and Clerks in the Department.....	1
" Crown Land Agents for sale of lands.....	3
" " " for disposal of Free Grants.....	4
Statement of lands sold, amounts of sales and collections.....	5
" Gross Collections	6
" Receipts, considered as Revenue.....	6
" " " Special Funds.....	7
" Gross Disbursements.....	8
" Letters Received and Mailed.....	11
" Timber and amounts accrued from Dues, etc.....	12
" Revenue collected from Woods and Forests.....	14
Return of Crown Timber Agents.....	15
" Locations, Sales, etc., under Free Grants Act.....	16
Statement of Crown Land Surveys completed during the year.....	19
" " " in progress.....	20
" Municipal Surveys for which instructions were issued.....	21
" " " confirmed.....	22
" Mineral Lands patented in unsurveyed territory.....	23
" Work performed in Survey Branch.....	24

	PAGE.
Statement of Candidates who have passed Board of Examiners of Land Surveyors....	25
Report on Colonization Roads and Bridges	26
" " North Division.....	27
" " West Division	30
" " East Division	37
Summary of Expenditure.....	43
Recapitulation.....	45
Surveyors' Reports :—	
District of Parry Sound—Mowat.....	46
" " Wallbridge	47
District of Nipissing—Butt.....	47
" " Paxton	49
" " McCraney.....	50
" " Ballentyne.....	51
" " Finlayson.....	53
District of Algoma—Gladstone.....	55
" " Bright and Bright Additional.....	58
" " Parkinson	59
" " Wells	60
" " Day.....	62

REPORT

OF THE

COMMISSIONER OF CROWN LANDS

OF THE

PROVINCE OF ONTARIO,

FOR THE YEAR 1879.

To His Honour the Honourable DONALD ALEXANDER MACDONALD, Lieutenant-Governor of the Province of Ontario:

MAY IT PLEASE YOUR HONOUR,

I have the honour, in conformity with the provisions of the Act respecting the sale and management of the Public Lands, of submitting to Your Honour the following Report of the proceedings, transactions and affairs of the Department of Crown Lands, for the year 1879, commencing as usual with statistical details and concluding by general observations.

CROWN LANDS.

There were sold of the Crown Lands, during the year 1879, 25,071 acres. The sales amount to \$25,489, and the collections to \$45,670. (See Appendix No. 4, page 5).

CLERGY LANDS.

There were sold of the Clergy Lands, during the year 1879, 2,488 acres. The sales amount to \$3,063, and the collections to \$20,186. (See Appendix No. 4, page 5).

COMMON SCHOOL LANDS.

There were sold of the Common School Lands, during the year 1879, 1,463 acres. The sales amount to \$4,824, and the collections to \$46,988. (See Appendix No. 4, page 5).

GRAMMAR SCHOOL LANDS.

There were sold of the Grammar School Lands, during the year 1879, 1,279 acres. The sales amount to \$1,842, and the collections to \$4,782. (*See Appendix No. 4, page 5.*)

COLLECTIONS AND REVENUE.

The total collections in the Department, during the year, amount to \$457,340, of which \$378,746 may be considered as Revenue. (*See Appendices Nos. 5 and 6, page 6.*)

DISBURSEMENTS.

The gross disbursements of the Department, for the year 1879, amounts to \$201,499. (*See Appendix No. 8, pages 8, 9 and 10.*)

REVENUE ARISING FROM CROWN TIMBER.

The accrual for timber dues, ground rents, etc., during the year 1879, is \$342,894.69. (*See Appendix No. 10, pages 12 and 13.*)

The amount collected on account of timber dues, ground rents, etc., during the year is \$332,014.47. (*See Appendix No. 11, page 14.*)

FREE GRANTS.

At the date of my last Report there were open for location under the Free Grants and Homestead Act, 94 Townships, and no further additions having been made during the year the number remains the same, that is to say, 94 Townships now open for location.

During the year 1879, 1,506 locations were made on 199,500 acres of land, 4,911 acres were sold to 123 locatees.

During the same period 1,018 lots located in former years were cancelled for non-performance of duties, and 513 Patents were issued to Free Grant settlers. (*See Appendix No. 13, pages 16, 17 and 18.*)

CROWN SURVEYS.

The following surveys have been performed during the year. The Townships of Mowat, Wallbridge, McCraney, Ballantyne, Butt, and Paxton, in the Huron and Ottawa Territory, have been subdivided into farm lots of one hundred acres each, and the Townships of Bright and Bright Additional, Day, Gladstone, Parkinson and Wells, on the North Shore of Lake Huron, in the District of Algoma, into lots of three hundred and twenty acres each, all the above named Surveys excepting those of Wallbridge and Butt have been completed and closed.

The returns of the Townships of Nightingale and Finlayson, in the Huron and Ottawa Territory, surveyed into farm lots in 1878, not having been received at the date of my last Report, have been completed and closed during the year.

The particulars in relation to all these Surveys, with the Surveyors' Reports will be found in *Appendices Nos. 14, 15 and 22 to 33, pages 19, 20 and 46 to 62.*

MUNICIPAL SURVEYS.

Nine Municipal Surveys have been confirmed during the year, consisting of the establishing and planting of stone or other durable monuments at the angles of lots, or in concession lines in the Townships of Georgina, West Gwillimbury, Howard, Pickering, Raleigh, Ross, Scugog, Thorah, and Uxbridge.

Instructions were issued for eleven Municipal Surveys during the year; four of which, have been completed and returned to the office, and approved and are included in those above mentioned.

The particulars will be found in *Appendices Nos. 16 and 17, pages 21 and 22.*

MINERAL SURVEYS.

Nine hundred and thirty-nine acres on the North Shores of Lakes Huron and Superior, in unsurveyed territory, have been patented for mining purposes during the year, the purchasers furnishing to the Department, Surveyors' Plans, Field-notes, and Descriptions of the Survey of their locations as required by the "General Mining Act." (*See Appendix No. 18, page 23.*)

COLONIZATION ROADS.

The total expenditure on Colonization Roads during the year 1879, amounts to \$111,903.82, the particulars of which will be found in the Superintendent's Report. (*Appendix No. 21, pages 26 to 45.*)

GENERAL OBSERVATIONS.

SALES.

The greater part of the Public Lands lying West of Toronto and South of Lake Huron having been disposed of and the chief part of the arrears due on former sales paid, there did not appear to be any further necessity for continuing the Crown Land Agencies established in the several counties with the exception of that for the County of Bruce. The Agencies for the Counties of Wellington, Huron, Perth and Grey have therefore been withdrawn and closed.

The moneys paid into the Department on account of the arrears due on former sales becoming diminished from year to year and the withdrawal from sale of so many Townships, embracing some of the best lands at the disposal of the Crown, and appropriating them as Free Grants, under the Free Grants and Homestead Law of 1868, are causing (as might be expected) a rapid diminution in the revenue arising from the sale of Crown Lands.

It has been generally supposed that the lands lying on the North Shore of Lake Huron between the Bruce Mines and French River were of a rocky and sterile character, and, with few exceptions, unfit for agricultural purposes, but a recent exploration and survey of several townships in that locality have shown that although the general features of the country are rough and rugged, there are found nevertheless, considerable tracts of land well adapted for settlement.

Parties seeking lands for settlement have had their attention drawn to these newly surveyed townships, and the consequence is that a considerable number of the lots are now occupied by squatters who report having raised excellent crops and express themselves well satisfied with their locations.

Many of the surveyed townships in the Muskoka, Parry Sound, Nipissing and Algoma Districts containing a large area of lands well adapted for agricultural purposes, are now occupied by squatters, some of whom have made extensive improvements, but the lands containing much valuable pine timber suitable for commercial purposes, and not being under license it has been found impracticable to place them in the market either for sale or location as Free Grants. It is hoped however that during the present Session of the Legislature such an Amendment will be made in the Act for the management of the Crown Timber as will justify the Department in opening the lands in these townships for settlement.

The Western extension of the Canada Central Railway having been completed to the distance of about 45 miles above Pembroke, and the remainder of the line from that point to its terminus at the east end of Lake Nipissing (a further distance of about 80 miles), being under contract and considerably advanced towards completion, it may be fairly assumed that the line will be nearly completed during the year 1880. This line will connect with the projected Sault St. Marie line, and it is probable that the Ontario Pacific Junction Railway will at an early day, be completed through the Muskoka and Parry Sound Districts, and form a junction with the said Railways in the vicinity of Lake Nipissing.

These lines when completed will pass through and open up a vast tract of country, much of which is good agricultural land, well adapted for stock-raising and dairy purposes. It also abounds in mineral wealth, and contains valuable pine and other timber suitable for commercial purposes.

WOODS AND FORESTS.

After having had to report for a number of years an unfavourable condition of the timber trade, it is gratifying to be in a position to announce that the year 1879 has shewn a decided improvement in what I consider the most important branch of the business viz.:—

SAWN LUMBER.

During the season just closed the American market has exhibited something like its old time activity, with considerable advance in prices, the latter being, however, neutralized, to some extent, by an increase in freight charge, owing to the great demand for vessels to carry grain, etc., a drawback which will be probably provided against during the coming winter by the building of additional tonnage.

The marked revival in the lumber business throughout the season may be looked upon as an indication that the trade has at last emerged from the gloom which has so long overshadowed it, and it may be reasonably expected that for years to come transactions will be fairly remunerative to shippers and dealers generally; a steady and continuous

market and profitable returns being preferable to inflated values such as obtained in 1872 and previous years.

With reference to sawn lumber, I would call the attention of Canadian saw-mill owners to a transaction which, in my opinion, should be both interesting and suggestive to them, inasmuch as it points to the opening up of a new outlet for the product of their mills, and, at the same time, an escape from the duty of \$2 per thousand feet, which meets them on shipments to the United States and renders it almost, if not altogether, impossible for them to compete with lumber from Michigan, especially when prices in the foreign market are low—I allude to the fact that a shipment of inch and inch-and-a-quarter sawn lumber was lately made direct from the mills at Ottawa, *via* the Montreal, Ottawa and Occidental and North Shore Railways to Quebec to be laden aboard a vessel for Glasgow—the transaction referred to, so far as the dealers in Ottawa are concerned, was not one of speculation but an outright purchase at the lumber yards by the shippers; the prices realized on delivery at the yards in Ottawa were as follows:—one inch “shipping culls,” \$6 to \$8 per M.; “log-run sidings,” one inch, \$9 per M.; a lot of one inch and one-and-a-quarter inch stuff (not classed) from \$8.50 to \$15 per M.; the total quantity forwarded by rail to Quebec being 451,407 feet, board measure, the vessel having a carrying capacity of 480,000 feet, board measure, that is equal to 800 loads of fifty cubic feet or 1,000 tons of forty cubic feet of square timber; the rate of freight across the Atlantic has not been ascertained nor the rate by rail from Ottawa to Quebec; the former is generally arranged by charter party in Britain and is fluctuating; the rate by rail is understood to have been very favourable to the shippers; but as the two railway lines mentioned are expected soon to be amalgamated and the shipment being one of a new and unusual character, which in the near future may assume large proportions, there was a reluctance to disclose the terms of transport.

Hitherto the produce of Canadian saw mills shipped to Europe has been in the shape of deals only, for the manufacture of which none but the very best of pine is brought into requisition, as the article is used on the other side of the Atlantic for fine finishing in buildings for which purpose the deals are cut up at saw mills into various thicknesses and dimensions after they reach the old country; the class of timber used in Canada for the manufacture of deals is not to be found in Europe and can meet with no competition in transatlantic ports, except from the United States, notably by deals from Michigan; the Baltic ports supply no pine of a texture fine enough for the uses to which American pine is applied; under the circumstances the shipment of inch lumber from Ottawa to Glasgow direct has an important significance, and it is hoped it may lead to such a change in the wood trade between this country and Europe as will not only result in profit to those engaged in it, but at the same time enhance the value of the pine forests in the lumber producing Provinces of the Dominion to which reference is made farther on in connection with the square timber trade.

The penetration of railways into the remote parts of the country as it proceeds will mark a revolutionary era in the timber trade; already where timber limits worked upon are remote the project has been entertained by saw-mill owners at Ottawa, of moving their mills from where they are now situated in the vicinity of the city, to localities nearer to the source of timber supply, a step which would do away with the tedious and

expensive process of bringing the saw logs by water to the Chaudiere, an operation which, owing to the falling off of the volume of water in the streams, in many cases extends into the second year and sometimes even to the third year after they have been cut in the woods before they reach the point of manufacture, during which time the owner of the logs not only suffers the loss of interest on the capital invested in the timber so delayed, but he also frequently sustains great loss of valuable timber in the course of transit.

The Canada Central Railway has already brought lumber from the mills at Pembroke which before the advent of that road would have been limited to the uncertainty of a local market, or otherwise the logs from which the lumber was produced subjected to the delay and expense of being taken to the saw-mills at Ottawa or even farther down the river as price or demand for the timber might render necessary or advisable.

When the Canada Central Railway reaches the vicinity of Lake Nipissing, and the proposed Ontario Pacific junction from Gravenhurst has been built, saw-mills will no doubt be erected on the lake, at which timber now locked up for the want of means of taking in supplies and the absence of a practicable outlet, will be manufactured into sawn lumber and speedily transported by either of the lines to points from which it can be shipped to Canadian or foreign markets ; the only outlet at present from the extensive region referred to is by River Wahanapitae and French River, the former entering the latter at a short distance above where it empties into the Georgian Bay ; no timber has been brought from the upper waters of the Wahanapitae, and the only venture of taking timber down French River was last winter, when some square pine was brought from South Bay, then rafted to Waubashene, and taken from thence by the Midland Railway to Port Hope, and finally by water to Quebec ; the same party who brought down the square timber last year, it is understood, has entered into a contract with the Maganetawan Lumber Co. to cut, at South Bay, Lake Nipissing, a large quantity of saw-logs to be taken down French River and delivered in spring at Byng Inlet to be there manufactured into lumber.

SQUARE PINE TIMBER.

During the year the square pine trade has been in a state of utter stagnation, at least until a few weeks before the close of navigation, when it is understood that some large quantities of timber (principally the produce of the Province of Quebec) changed hands for shipment in spring, on the faith of an expected brisk demand in the British market next season ; the prices obtained at these sales have not transpired.

The great loss sustained yearly by the Province and the Revenue from waste of valuable material in the manufacture of square and waney pine, especially in connection with the former which is hewn to a "proud edge," has for some time occupied my serious attention.

It is estimated on good grounds that one-fourth of every tree cut down to be made into square or waney timber, is lost to the wealth of the country, and that the revenue suffers proportionately :—When the tree is cut down it is lined off for squaring, and the "round" outside of the lines is what is called *beaten* off on the four sides ; the wood thus beaten or slashed off in preparation for hewing by the broad axe is the prime part of the tree, from which the best class of clear lumber is obtained when the timber is taken in the

round to a saw-mill :—besides the destruction of timber of the finest texture and greatest value, there is the upper portion of the tree near to, and partly into the top, which would yield lumber, of an inferior quality it is true, but suitable either for domestic use or for export to the American market, where during general business prosperity, large quantities of the lower grades of lumber are required for packing and other purposes connected with trade of all kinds ; as much as one hundred million feet, it is stated, being sold annually, by two or three firms in Brooklyn and New York, to be used as boxes for packages of petroleum alone ; but the upper part of the tree is rejected by the square timber manufacturer, and left in the woods with the fine wood beaten off, to rot and become material for feeding fires in the forests, by which more timber has been destroyed than has ever been cut down for commercial purposes.

The following will shew the estimated loss to the Province and the Revenue from waste in getting out square pine, from 1868 to 1877, both inclusive :—Total quantity taken from public and private lands during the ten years, 119,250,420 cubic feet ; waste, one-fourth of each tree, equal to one-third of the total mentioned, viz. : 39,750,140 cubic feet, or say in round numbers 477 million feet board measure, which may be valued one-half at \$10 per 1,000 feet, and one-half at \$5 per 1,000 feet, representing relatively the prime timber beaten off and the inferior timber from the upper part of the tree, average value say \$7.50 per 1,000 feet, equal to \$3,577,500 loss to the Province for the ten years, or an annual loss in material wealth of \$357,750.00.

The quantity taken from public lands during the ten years is 87,620,135 cubic feet, the waste on which on the basis given being equal to 29,206,711 cubic feet, or 350 million feet board measure subject to crown dues at \$750 per million feet equal to \$262,500 lost to the Revenue during the ten years, or at the rate of \$26,250.00 per annum.

The loss to the country and revenue from timber destroyed by fires which might have been confined to a limited area, and possibly extinguished, before great damage had been done to the forest, had they not been fed by the debris of trees left to rot and dry, is incalculable.

In 1877 I instructed the officer in charge of the Woods and Forests Branch of the Department to prepare a paper on the subject of the waste of timber referred to, for the purpose of submitting it to the Department of Crown Lands, Quebec, with the view of joint action by the two Provinces, towards the discouragement of the further continuance of the square timber trade. On addressing himself to the task, he found that the lack of knowledge of the mode of dealing with the square timber after its arrival in the old country in the square "log," was a great drawback to writing intelligently on the subject, as it was essential to know how the timber was disposed of at the great centres of import such as Liverpool, London, Glasgow, &c. ; who the parties were who ultimately acquired the handling of it ; where it was cut up into specification bills to meet the wants of those who put the products of the "logs" after they had been reduced to the required dimensions, to practical use, &c., so that the Department might be in possession of facts more or less important, when it undertook to shew those who are engaged in the trade in Canada that in abandoning it, and thereby stopping the supply of square timber, they would create a market for their material on the other side of the Atlantic, in the shape of sawn lumber.

I have since procured some information on the points referred to, from which I learn

that the timber is imported direct by wealthy saw-mill proprietors, either by the venture of individuals singly, in so many cargoes each year, or the importation of a number of cargoes annually by several saw-mill men combined ; or it is consigned by Canadian shippers to brokers or agents to be sold on commission ; in the latter case, the timber is generally disposed of by auction at which the saw-mill owners purchase it, and any surplus over what they require for their own establishments they sell in small quantities, sometimes a few pieces at a time to builders and country dealers of limited means who have it sawn at small mills, *and often by hand*, at the villages in the interior for local wants. These saw-mill proprietors having virtually a monopoly of the lumber and bill stuff produced from the timber imported or purchased by them at auction sales, are naturally opposed to the introduction of wood goods into the market they supply in any other shape than in the square log as at present, but it is time that the Canadian lumberer, engaged in the square pine business, should open his eyes to the alarming waste of a material, the value of which is increasing every year ; (that in fact he is stripping his limits and disposing of his timber frequently at a loss, or at best, during several years past, at a rate which seldom pays more than the cost of cutting down, squaring, drawing, and taking to market, while at the same time he leaves in the woods as useless one-fourth of each tree he levels to the ground, one-half of the timber so left being the most valuable part of the tree) ; and see the necessity of turning his attention to saw-milling operations as a more economical mode of manufacturing his timber, by which he would not only benefit himself by turning to profitable account what is now so wantonly wasted, but the Province generally, by increasing the field of labour for its people, while the Provincial Treasury would derive additional revenue from the material saved and utilized.

It may not be out of place to mention here that saw-milling is, to a certain extent, a factor in the settlement of the country, from the fact that many of the employés, from their steady habits and value as workmen, are kept in permanent employment summer and winter, in connection with the establishments, and are induced in consequence to take up lands in the vicinity, which are improved by the families of those having grown up children, and by hired help in the case of unmarried men, till ultimately considerable sections in the neighborhood of the mills become settled and cleared, with comfortable homes on the locations ; while on the contrary, the men employed in getting out square timber are generally without fixed homes or continuous employment. Their engagements terminate in the spring ; in the interim, until they re-engage for the following winter, they too frequently remain idle and spend their earnings in a reckless manner, and are penniless, and often in debt, when they return to the woods.

In view of what has been stated regarding the waste of valuable timber and consequent loss to the country and the revenue, it is to be hoped that those who hold timber limits and have confined their operations to the manufacture of square pine, will see the propriety and necessity of speedily reducing the production to the smallless possible extent with the object of wholly withdrawing from the trade at an early day.

I would here advert to information which has been furnished me through official correspondence with Mr. C. Berven, a gentleman in the timber trade in Britain. Mr. Berven informs me that, in his opinion, a large and profitable trade might be entered

into between Canada and the west coast of England, in mining timber and pit props, etc., which have so far been imported from Norway, Sweden, and Finland, to the east coast, but the transport by rail to the vicinity of the mines on the west coast being expensive, he considers that Canada could successfully compete with the Baltic source of supply, by shipping direct to the point of destination, by which rail transport would be avoided.

The following is a synopsis of Mr. Berven's reply to my letter of 12th of November, putting a series of questions on the subject referred to :

Pit props and mining timber, can be used of red pine, fir, tamarac (larch), in their round state with the bark mostly taken off, so that it can be stowed and handled better ; some colliery people prefer the bark off altogether. Dimensions—3 inches diameter across the small end ; 10 feet and upwards in length, with an average length of 18 to 19 feet ; 4 inches diameter ; 10 feet and upwards in length, average length, 16 to 17 feet ; 5 inches diameter, average 17 to 18 feet in length. To stow these properly, short props can be sent as stowage in the following sizes : diameter at small end, 3 inches ; lengths, $3\frac{1}{2}$ and 4 feet ; 4 inches, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, $6\frac{1}{2}$, 7 feet ; 5 inches, 5, $5\frac{1}{2}$, 6, $6\frac{1}{2}$ feet ; 6 inches, $5\frac{1}{2}$, 6, $6\frac{1}{2}$, 7 feet ; 7 inches, $5\frac{1}{2}$, 6, $6\frac{1}{2}$, 7 feet.

SQUARE MINING TIMBER.

Same sort of wood 10 feet and upwards in length, average 25 to 26 feet in length, from 6 to 9 inches in diameter in the middle ; this class of timber is shipped from Sweden, hewn square in the tree length, of course, tapering as the tree is shaped.

Partly squared Mining Timber, same sort of wood, same dimensions, not so well squared as the previous mentioned, usually having a wane of 1 to 2 inches.

TELEGRAPH POLES

of fir trees, to be round, hard-grown, straight, and felled between 1st November and 28th February, each tree to have the natural butt, and to be free of large and dead knots and other defects ; length of poles in feet 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 45, 55, minimum diameter in inches at top end, 5, 5, $5\frac{1}{2}$, $5\frac{3}{4}$, 6, 6, $6\frac{1}{4}$, $6\frac{1}{2}$, $6\frac{1}{2}$, $6\frac{3}{4}$, 7, $7\frac{1}{4}$:—minimum diameter in inches 5 feet from butt, $7\frac{1}{2}$, $7\frac{1}{2}$, 8, $8\frac{1}{4}$, $8\frac{3}{4}$, 9, $9\frac{1}{4}$, $9\frac{3}{4}$, 10, $10\frac{1}{4}$, $10\frac{3}{4}$, $11\frac{1}{2}$, $12\frac{1}{4}$, 13.

RAILWAY SLEEPERS.

These are of fir and are imported from Russia, of the following sizes, chiefly 8 feet 11 inches long 10 x 10 inches, 9 feet long 10 x 10 inches ; they are imported in these sizes but are used for the railways $8\frac{1}{2}$ feet 10 x 5 inches, and 9 feet 10 x 5 inches ; the wood in all cases to be straight, in order to bear the pressure ; the fine grain would be best, but no well-grown wood is refused. With regard to the average annual imports for a series of years Mr. Berven says it would take him a long time to make up a proper statement, but his calculation is that on an average about 50,000,000 running feet of pit-props 3 to 4 inches at the top end ; and 1 to $1\frac{1}{4}$ million cubic feet of 5 inch round timber, square and partly squared mining timber are the average annual imports into West Hartlepool.

The import has not been large this year, but as many as 60 to 80 cargoes, principally in steamers of 1,000 tons burthen, have been imported into the above port yearly for a

number of years. Mr. Berven says "this trade would be a profitable one to the west coast." Telegraph poles, 25,000 to 30,000, various lengths, could be taken yearly.

The average prices of props, delivered at Hartlepool during the last year, were about as follows, viz. :—

3 inch long props	4s.	per 72 running feet.
4 "	" "	5s.
5 "	" "	6s.
3 "	short "	3s. 3d.
4 "	" "	3s. 9d.
5 "	" "	5s.

Round and partly square mining timber 32s. 6d. to 35s. 6d. per load of 50 cubic feet string or tape measure ($\frac{1}{4}$ th girth). Square timber 40s. per load of 50 cubic feet calliper measure, square railway sleepers 10 x 10, 4s. each ; telegraph poles 38s. to 42s. per load of 50 cubic feet string measure.

The prices mentioned are sterling money, and are the average for about ten years, prices have been very low of late, but are now rising ; besides the articles enumerated, a very great quantity of wood of various descriptions, can be utilized and cut into different sizes for small tubs (used under ground in collieries), boxes &c., and small sleepers for tramways in the mines :—Birch for bobbins, &c., is also required 3 $\frac{1}{2}$ to 4 inches at top, to average 6 feet in length ; the bark chipped off so that it may dry, the chipping off of the bark to be only here and there along the tree, leaving some bark on to prevent it from splitting ; this is worth about 1s. per cubic foot at Liverpool, c. i. f. (cost, insurance and freight) ; ships are chartered principally per 1,500 running feet for 3, 4, 5, inch top, long props and short in proportion ; round, partly square, and squared, per 50 cubic feet string measure ; what is meant by round timber is poles 5 inch, to 6 inch at top ends, sold by $\frac{1}{4}$ girth measure, prices already mentioned. Mr. Berven concludes by saying, "I think the trade in timber between England and Canada, is not half cultivated and something should be done to bring it forward."

The characteristic of modern commerce is to seek out markets wherever they can be found, in which commodities to be disposed of can be sold to the best advantage, whether natural products in a raw state where the means of profitable manufacture do not exist where they are produced, or in a manufactured state when such means are available ; and in proportion to the energy and enterprise used in pressing forward and occupying every vantage ground in trade, is the measure of success which attends individuals and communities. It is not usual in these days to wait until a customer comes knocking at your door to find out what you have for sale : to succeed, it is necessary that such should be made known far and wide ; and to create a business of any magnitude, the first object is to find out what is required not only at home but abroad, *and having the article*, to calculate whether or not the field can be entered at a fair profit in furnishing what is wanted. In the Canadian timber trade there seems to have been no lack of energy, but in my humble opinion, it does not appear to have been accompanied by that kind of prudent enterprise which might be expected from the intelligent men who are engaged in it. The square pine manufacturers have been contented from year to year to go on bargaining with a

Quebec merchant to get out so many cubic feet of a certain average, for a price agreed upon; the merchant writes home to his agent or partner to effect sales, or goes himself or some one for him, for that purpose, or frequently ships on his own account the timber which the lumberer has contracted for and delivered to him. Not unfrequently the lumberer possessed of means gets out his timber without advances in money or supplies having been made to him, takes it to Quebec to sell it at the best price he can obtain from the dealers there. Sometimes this has succeeded better than contracting, but where the venture fails through a downward tendency in the market, or a rise in freights, it becomes a serious matter to hold it over, as cove charges and other incidentals rapidly effect a shrinkage in the value of the article. But so it has gone on since the early days of getting out square pine; the same well-trodden rut has been travelled; the same traffic in the timber in the crude shape of the square "log" has been continued without apparently the actual producer and quasi proprietor of the pine upon the timber limits reflecting on the waste of material, or the propriety and prudence of economizing it and turning it to more profitable account.

Saw-mill owners, although they have had trying times during the past few years, are not generally so unfortunate as the operators in square pine, the trade in which is peculiarly fluctuating and uncertain. The former have always had more or less of a domestic trade, and, unless under extraordinary circumstances, such as the late prolonged depression, can depend on the United States for a market, with prices generally affording a reasonable profit, notwithstanding the American duty of \$2 per 1,000 feet; and with these markets, domestic and across the line, they have hitherto seemed to be satisfied without seeking a European opening for their lumber.

I feel a delicacy in giving advice in this matter to parties who may very naturally say that they know their own business best, but nevertheless I would venture to observe that those in Canada engaged or interested in the trade in timber, which is next in value to agricultural products in the exports of the Dominion, viz.: In 1878—\$20,054,829 and \$27,281,089 respectively, should acquire a knowledge of and endeavour to cultivate a trans-Atlantic trade, and would suggest that a spirited effort should be made to extend the sawn lumber business to countries which have hitherto imported the timber in a crude state and manufactured it to suit their purposes. Already have the European and other markets been successfully invaded by the produce of industries of various kinds from the American continent, and there seems to be no reason why our great staple export should not meet with equal success.

It may seem out of place in this report, to indicate in anything like detail, the steps which might be adopted to carry out what has been hinted at, but a preliminary step would seem to be for a few saw-mill proprietors to join together and send to the Old Country two or three practical men having a thorough knowledge of lumbering, the different qualities of lumber produced in Canada, and the minutiae of the working of saw-mills, who might be accompanied by one or two joiners or house-carpenters, to make technical observations as to the various uses and forms in which the lumber is applied. Let these parties visit the larger saw-mills in England, Ireland and Scotland, and on the continent if deemed expedient, with sufficient time allowed to inspect and report on the whole subject to their employers, having specially in view the required dimensions of

boards and bill stuff, in all forms, which would suit the several markets; and also make inquiry as to freights, insurance, port charges, &c., and upon such report, and after due consideration, the parties interested would be in a position to come to a conclusion whether or not a fair paying business could be pushed in the direction indicated. The attempt would seem to be worth making; and if prepared assortments of Canadian lumber were exhibited in the principal markets of the Old Country, even although they may not take at first, which perhaps would be too much to expect, there is at least a prospect of success through the exercise of sound judgment, patience and perseverance.

MINES AND MINERALS.

All that part of the Province of Ontario composed of the rear Townships in the Counties of Lanark, Frontenac, Addington, Hastings, Peterboro' and Victoria are found to be rich in mineral wealth, their chief productions being gold and iron.

GOLD.

It will doubtless be within the recollection of many that at the time the famous Richardson Mine was discovered in Madoc, several parties not possessed of sufficient caution or practical experience in mining, met with serious losses in their endeavour to carry on mining for gold in the townships of Madoc and Marmora. This caused a reaction, and some years of depression in mining interests followed. Some parties, however, having confidence in the richness of the gold-bearing quartz, continued operations with varied success, and it has only been within the last eighteen months, when science and practical experience have been brought to bear that the richness of the Madoc and Marmora gold fields have been fully established. Large sums of money have recently been expended in the erection of improved machinery for crushing the rock and separating the gold from it, and those engaged in the business entertain the most sanguine hopes of success.

SILVER.

Some rich specimens of silver ore have been recently found in the vicinity of Three Mile Lake, in the Township of Ryerson, in the District of Muskoka. A company was formed in Buffalo last summer to work a mine in that township, and are said to have sunk a shaft to a considerable depth and are now drifting and following the vein. Those interested in the undertaking entertain sanguine hopes for the future.

IRON.

The Townships of Marmora and Madoc have been known for several years past to contain large deposits of iron ore, but the heavy costs of transportation combined with the low prices of iron, have until very recently deterred parties from utilizing the mines to any considerable extent, and it has been only within the last year that railroads have been carried into the interior by which facilities have been furnished for carrying away the ore, that the real value of the immense deposits in the counties of Hastings, Peterboro' and Victoria have become fully known.

The ore, particularly that which is obtained in the township of Madoc, is said to

be of the very best description found in America for the manufacture of Bessemer steel, and about 200 tons have been shipped from two of the Madoc mines daily for several weeks past to the United States, while a considerable quantity has been shipped from other mines to the same destination.

Iron ore is also found in large quantities in the Counties of Lanark, Frontenac and Addington, and some thousands of tons have been dug up within the last six years and conveyed to Brockville and Kingston and thence shipped to the United States. I am therefore led to hope that the iron interests in Ontario are about to assume large proportions.

LEAD GALENA,

containing a percentage of silver, has also been discovered in several of the back townships and worked to a considerable extent, but for some reason or other the works have been discontinued.

PHOSPHATES

have been discovered in the rear townships, and large quantities conveyed to Brockville and Kingston and thence shipped to Europe, but the price of the mineral having greatly declined, the enterprise has been suffered to languish, but it is hoped that better prices will soon be obtained, when phosphate mining will again be carried on with profit.

ASBESTOS

is said to have been discovered in the Township of Lake, from which several fair samples have been obtained, but the mine not having been properly opened its value cannot now be ascertained.

MINING ON LAKE SUPERIOR.

Silver Islet appears to be producing its usual quantity of the precious metal, and mining operations in the other parts of the Thunder Bay District, although not carried on with increased energy during the year, have nevertheless, been sufficiently successful to inspire hopes for the future.

Prospecting has been carried on to some considerable extent in the neighbourhood of Pigeon River and on the Islands in the Lake of the Woods, and some rich specimens of gold bearing quartz are said to have been discovered, but the mines have not been sufficiently tested to determine their value.

FREE GRANTS.

A considerable decrease is found to have taken place in the number of locations this year, when compared with those of 1877 and 1878, the number in the former being 1,914, and in the latter 2,115; but this decrease may be easily accounted for. Firstly, by the preference given to the Prairie Provinces of the North-West; and secondly, by the fact that no new townships have been appropriated as Free Grants during the year, and the parties who would have been located there in due form, had the lands been open, have occupied them as squatters, and their names have consequently not been included in the list of locations for the year 1879. These newly surveyed townships were withheld from

location until an amendment would be made to the Act relating to the pine timber, which is expected to take place this Session, after which these townships will be thrown open, and the hundreds of parties who now occupy the lands as squatters will be located in due form.

Representations have been repeatedly made to my Department that the present practice of permitting females to take up lands under the Free Grants Act is open to great abuse, because a very small percentage only of this class of locatees ever comply with the regulations regarding settlement. In most cases the lands so located are secured for the benefit of the father, or other relatives, who already hold all the land the law allows and all they can conveniently work. The consequence is the lands remain unimproved, the progress of the settlement is retarded, and new settlers are forced to go farther back. Being convinced that these complaints are well founded, and finding upon inquiry that the experience of other Provinces which have adopted the Free Grant system has led them to the same conclusion, I have recommended the passing of an Act this Session changing the law in this respect.

Respectfully submitted,

T. B. PARDEE,
Commissioner of Crown Lands.

DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1879.

APPENDIX No. 1.

RETURN of Officers and Clerks in the Department of Crown Lands for the year 1879.

BRANCH.	Name.	Designation.	When appointed.	Salary per annum.	REMARKS.
Hon. T. B. Pardoe	Commissioner	1873, Dec. 4th	\$ 4,000 00		
Thos. H. Johnson	Assistant Commissioner	1869, Aug. 21st	2,800 00		
Geo. Kennedy	Law Clerk	1872, Feb. 1st	1,800 00		
H. A. Ford	Shorthand Writer and Clerk	1872, Aug. 1st	1,000 00		Resigned 6th December, 1879.
J. C. Tarbitt	Chief Clerk	1841, June 1st	2,000 00		
A. Kirkwood	Clerk	1854, March 21st	1,700 00		
J. M. Grant	do	1860, May 12th	1,250 00		
J. J. Murphy	do in charge of Free Grants	1872, May 1st	1,000 00		
P. Alina	do	1871, Aug. 1st	850 00		
Julian Sale	do	1871, Aug. 5th	750 00		
Thomas Devine	Deputy Surveyor-General	1846, July 11th	2,000 00		
G. B. Kirkpatrick	Surveyor and Draughtsman	1866, Jan. 30th	1,250 00		
W. Revell	Draughtsman	1871, Oct. 2nd	950 00		
E. Fox	Chief Clerk, Patients	1857, Sep. 28th	1,380 00		
A. J. Taylor	Clerk	1872, Oct. 1st	1,200 00		
J. Innes	do	1848, Nov. 1st	1,100 00		
J. W. Bridgland	Surveyor and Superintendent of Colonization Roads	1856, Jan. 22nd	1,800 00		
C. Cashman	Clerk	1872, Sep. 1st	1,000 00		
G. B. Cowper	Chief Clerk	1857, Oct. 14th	2,000 00		
J. A. MacInnes	Clerk	1872, Dec. 20th	1,200 00		
H. G. Langlois	do	1868, Aug. 1st	850 00		
E. G. Kirby	do	1869, Aug. 1st	700 00		
Woods and Forests	Accountant	1852, April 16th	2,000 00		
Accounts	Book-keeper	1861, April 15th	1,250 00		
	Chief Clerk in charge of Agents' Returns	1862, May 14th	1,250 00		
	Clerk	1873, Dec. 20th	750 00		

APPENDIX No. 1—*Continued.*

Return of Officers and Clerks in the Department of Crown Lands for the year 1879.

BRANCH.	Name.	Designation.	When appointed.	Salary per annum.	REMARKS.
Registry	J. Morphy	Registrar	1851, June, 1st	1,600 00	
	C. P. Higgins	Clerk	1873, July 1st,	850 00	
	J. Bradshaw	Office-keeper	1852, March 27th ..	500 00	
	A. McDonald	Messenger	1862, May 19th	500 00	

THOS. H. JOHNSON,
Assistant Commissioner.

THOS. H. JOHNSON,

Accountant,

WILLIAM FORD,
DEPARTMENT OF CROWN LANDS,
TORONTO, 31ST DECEMBER, 1879.

APPENDIX No. 2.

List of Crown Land Agents for Sale of Lands, 1879.

NAME.	District or County.	Date of Appointment.	Commission.	REMARKS.
A. S. Cadenhead	Wellington	1870, Aug. 6	28 29	Agency closed 31st Dec., 1879.
Jno. F. Day	Part of Algoma District	1875, July 19	34 26	Appointed Free Grant Agent 1st July, 1879.
Hugh Hamilton.	Huron	1872, Oct. 23	211 17	Agency closed 31st December, 1879.
William Jackson.	Grey...	1854, Nov. 3	171 40	" "
Alex. McNabb.	Bruce	1851, April 29	316 35	
E. Perry	Part of Frontenac and Addington	1856, March 27		
J. McKibbon	" Victoria,	1870, Nov. 24	33 58	
R. Macpherson	" Frontenac	1871, July 19	500 00	Salary per annum.
J. Sharman	Perth	1853, April 27 .....	.....	Agency closed 31st December, 1879.

WILLIAM FORD,
Accountant.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1879.

THOS. H. JOHNSON
Assistant Commissioner.

APPENDIX, No. 3.

List of Crown Land Agents for the disposal of Free Grants, 1879.

NAME.	District or County	DATE OF APPOINTMENT	Salary per Annum.	REMARKS.
D. Anderson.....	Part of Peterborough.....	1870, November 21st.....	500 00	
S. G. Best.....	do Parry Sound District.....	1872, March 23d.....	500 00	
C. P. Brown.....	do Algoma.....	1872, June 25th.....	500 00	
J. Bowkett.....	St. Joseph's Island.....	1871, July 17th.....	500 00	
Jno. F. Day	Part of Algoma District.....	1875, July 19th.....	500 00	
J. R. Dawson.....	Frontenac and Adirondack.....	1877, January 17th.....	500 00	
E. Handy.....	do Parry Sound District.....	1878, January 3rd.....	500 00	
J. W. Fitzgerald.....	do Victoria, &c.....	1875, November 9th.....	500 00	
A. Kennedy.....	do Renfrew.....	1871, August 21st.....	500 00	
J. Maher.....	do do.....	1875, March 31st.....	500 00	
T. McMurray.....	do Parry Sound District.....	1875, August 17th.....	500 00	
H. MacKay.....	do do.....	1879, July 12th.....	500 00	
J. Reeves.....	do District of Nipissing.....	1872, February 12th.....	500 00	
J. R. Tait.....	do Hastings.....	1869, May 28th.....	500 00	
Aubrey White.....	do District of Muskoka.....	1875, April 30th.....	500 00	
Amos Wright	do Thunder Bay District.....	1875, May 5th.....	500 00	

WILLIAM FORD,
Accountant.

DEPARTMENT OF CROWN LANDS,
Toronto, 31st December, 1879.

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 4.

STATEMENT of Acres of Land Sold, Amount of Sales, and Amount of Collections
for the year 1879.

SERVICE.	Acres Sold	Amount of		Amount of Collections.
		S	cts.	
Crown Lands	25,071	25,489	47	45,670 22
Clergy Lands.....	2,488	3,063	36	20,186 49
Common School Lands.	1,463	4,824	04	46,987 85
Grammar School Lands	1,279	1,842	61	4,782 56
Total.....	30,301	35,219	48	117,627 12

THOS. H. JOHNSON,

Assistant Commissioner.

WILLIAM FORD,

*Accountant.*DEPARTMENT OF CROWN LANDS,
TORONTO, 31ST DECEMBER, 1879.

APPENDIX No. 5.

STATEMENT of Gross Collections of the Department of Crown Lands for 1879.

SERVICE.	\$	cts.
Crown Lands	45,670	22
Clergy Lands	20,186	49
Common School Lands	46,987	85
Grammar School Lands	4,782	56
Woods and Forests	332,014	47
Casual Fees	389	45
Inspection Fees	197	65
Surveyor's Fee Fund	181	35
Settlers' Homestead Fund	292	88
Suspense Account	6,637	35
	457,340	27

THOS. H. JOHNSON,

*Assistant Commissioner.*WILLIAM FORD,
*Accountant.*DEPARTMENT OF CROWN LANDS,
TORONTO, 31ST DECEMBER, 1879.

APPENDIX No. 6.

STATEMENT of the Receipts of the Department of Crown Lands for the year 1879,
which are considered as Revenue.

SERVICE.	\$	cts.
Crown Lands	45,670	22
Woods and Forests	332,014	47
Casual Fees	389	45
Board of Surveyors	181	35
Inspection Fees	197	65
Settlers' Homestead Fund	292	88
	378,746	02

THOS. H. JOHNSON,

*Assistant Commissioner.*WILLIAM FORD,
*Accountant.*DEPARTMENT OF CROWN LANDS,
TORONTO, 31ST DECEMBER, 1879.

APPENDIX 7

STATEMENT of the Receipts of the Department of Crown Lands, for the year 1879, which are considered as *Special Funds*.

S E R V I C E.	\$	c.	\$	c.
<i>Clergy Lands :</i>				
Principal	12,664	25		
Interest	7,522	24		
			20,186	49
<i>Common School Lands :</i>				
Principal	25,467	78		
Interest	21,520	07		
			46,987	85
<i>Grammar School Lands :</i>				
Principal	3,716	40		
Interest	1,066	16		
			4,782	56
Total Collections				71,956 90
<i>Refunds :</i>				
Common School Lands				619 17

THOS. H. JOHNSON,
Assistant Commissioner.

WILLIAM FORD,
Accountant.

DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1879

APPENDIX No. 8.

STATEMENT of the Gross Disbursements of the Department of Crown Lands for the year 1879.

S E R V I C E .

AGENTS' SALARIES AND DISBURSEMENTS.	\$ ets.	\$ ets.
<i>Commission.</i>		
A. S. Cadenhead	28 29	
Jno. F. Day	34 26	
H. Hamilton	211 17	
William Jackson	171 40	
J. McKibbon	33 58	
A. McNabb	316 35	
		795 05
<i>Agents' Salaries.—Land.</i>		
D. Anderson	500 00	
S. G. Best	500 00	
J. Bowker	250 00	
C. P. Brown	500 00	
Jno. F. Day	250 00	
J. R. Dawson	500 00	
J. W. Fitzgerald	500 00	
E. Handy	500 00	
Adam Kennedy	500 00	
J. Mahon	500 00	
R. Macpherson	500 00	
Thos. McMurray	250 00	
H. Mackay	235 90	
Jas. Reeves	500 00	
J. R. Tait	500 00	
Aubrey White	500 00	
Amos Wright	500 00	
		7,485 90
<i>Agents' Salaries.—Timber.</i>		
Jas. F. Way	1,440 00	
J. A. G. Crozier	500 00	
J. B. McWilliams	2,000 00	
Thos. E. Johnson	1,600 00	
J. McDonald	150 00	
		5,690 00
<i>Agents' Postage.</i>		
D. Anderson	16 60	
S. G. Best	13 97	
J. Bowker	5 84	
C. P. Brown	16 67	
A. S. Cadenhead	5 40	
Jno. F. Day	5 89	
J. R. Dawson	12 48	
J. W. Fitzgerald	24 88	
H. Hamilton	23 98	
W. Jackson	19 67	
Adam Kennedy	8 19	
J. Mahon	3 05	
T. McMurray	26 49	
H. Mackay	5 89	
Alex. McNabb	31 33	
J. R. Tait	15 74	
Aubrey White	78 50	
E. Handy	19 35	
		333 92
<i>Carried forward</i>		

APPENDIX No. 8.—*Continued.*

STATEMENT of the Gross Disbursements of the Department of Crown Lands for the year 1879.

S E R V I C E .

	\$ cts.	\$ cts.	\$ cts.
<i>Brought forward</i>			
<i>Inspections.</i>			
S. G. Best.....	5 20		
Jno. F. Day.....	105 75		
J. R. Dawson.....	7 35		
J. Mahon.....	5 40		
E. Perry.....	54 70		
A. White.....	116 00		
E. Handy.....	4 50		
A. Shaw.....	360 60		
J. S. J. Watson.....	16 00		
Jno. Green.....	35 00		
D. F. McDonald.....	559 10		
	1,269 00		
<i>Miscellaneous.</i>			
Jno. F. Day, Stationery.....	2 00		
A. White, Expenses to Toronto.....	20 50		
Jos. F. Way, Disbursements.....	460 00		
Thos. E. Johnson, do.....	73 50		
J. B. McWilliams, do.....	281 62		
A. J. Russell, do.....	52 18		
J. Wilson, Timber Services.....	297 50		
C. E. Belle, do.....	100 00		
G. B. Cowper, Expenses Seizing Geo. Randolph's Raft.....	56 00		
J. Shaw, do.....	136 61		
E. Anderson, do.....	61 00		
G. N. Matheson, do.....	217 00		
W. J. Keays, do.....	10 00		
J. S. Thatcher, do.....	112 90		
J. A. G. Crozier, Board at Toronto.....	68 75		
D. A. McDonald, Expenses seizing Crone & Paton's logs.....	85 00		
	2,034 56		
		17,608 43	
<i>Wood Ranging.</i>			
J. Shaw.....	1,142 06		
J. W. Smith.....	1,007 09		
S. L. Soper.....	100 60		
J. B. Turgeon.....	650 00		
Geo. Bick.....	1,186 73		
J. Brady.....	640 00		
P. W. Freeman.....	1,101 30		
S. M. Johnson.....	1,591 58		
A. G. Judd.....	905 15		
J. Kennedy.....	680 40		
T. W. Lee.....	698 22		
D. F. McDonald.....	1,193 63		
W. Russell.....	1,616 70		
J. B. Campbell.....	415 00		
A. White.....	248 25		
W. McGowan.....	40 00		
N. Crowe.....	525 00		
W. E. McLaughlin.....	4 00		
J. J. Gough.....	9 00		
J. Sharpe.....	225 37		
F. B. Day.....	24 00		
		14,003 48	
<i>Carried forward</i>			

APPENDIX No. 8.—*Continued.*

STATEMENT of the Gross Disbursements of the Department of Crown Lands for the year 1879.

S E R V I C E .	—	—	—
		\$ cts.	\$ cts.
<i>Brought forward.</i> .....	.....	.....	.....
Refunds .....	.....	.....	12,606 38
Colonization Roads .....	.....	.....	110,049 72
Surveys .....	.....	.....	35,844 26
<i>Contingencies.</i>			
Printing and Binding .....	.....	1,162 06	
Stationery .....	.....	1,366 65	
Postage .....	.....	825 00	
Fuel .....	.....	331 00	
Fireman .....	.....	547 50	
Night Watchman .....	.....	456 25	
Advertising .....	.....	83 95	
Subscriptions .....	.....	199 56	
Extra Clerks, not on permanent list, paid out of contingencies .....	.....	2,508 33	
Law costs .....	.....	528 00	
Sundries .....	.....	2,275 20	
Two per cent. of duties collected on timber cut on road allowances paid to Municipalities .....	.....		10,313 51
Board of Surveyors .....	.....		753 31
			320 00
			\$201,499 09

THOS. H. JOHNSON,

Assistant Commissioner.

WILLIAM FORD,

Accountant.

DEPARTMENT OF CROWN LANDS,

TORONTO, 31st December, 1879.

APPENDIX No. 9.

STATEMENT of the Number of Letters received and mailed by the Department of Crown Lands in the years 1876, 1877, 1878 and 1879.

YEARS.	BRANCHES.		TOTAL.	Names Indexed.	Orders in Council.	Returned, not called for at address.
	Accounts.	Surveys.				
1876.....	11,897	2,146	838	1,968	48	18,280
1877.....	11,920	2,159	1,187	2,240	66	19,014
1878.....	12,366	1,931	1,081	2,013	58	19,011
1879.....	10,190	1,596	856	1,966	64	16,603

Letters mailed from the Department in 1876, 18,958; in 1877, 19,625; in 1878, 20,087; in 1879, 18,526.

JOHN MORPHY,
Registrar.

Toronto, Dec. 31st, 1879.

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX

WOODS AND

STATEMENT of Timber and Amounts accrued from Timber Dues, Ground

QUANTITIES AND DESCRIPT

TERRITORIES AND NAMES OF AGENTS.	Area under License. Square miles.	Saw Logs.				Oar Logs. Pieces.	
		White Pine.		Other.			
		Pieces.	Stand- ards.	Pieces.	Stand- ard.		
Ottawa Agency. A. J. Russell, Agent	7,202	871,711	708,454	2,703	1,394	613	
Belleville Agency. J. F. Way, Agent	1,203	728,117	416,470	6,314	3,127	.....
Western Timber District.....	7,679	665,505	489,112	.....	.....	.....
Total.....	16,084	2,265,333	1,614,036	9,017	4,521	613	

GENERAL STATEMENT

TERRITORIES AND NAMES OF AGENTS.	Railway Ties. Pieces.	Hemlock.		Maple.		Cedar, 16 feet. Pieces. Inches.	
		Pieces.	Feet.	Pieces.	Feet.	Pieces.	Inches.
Ottawa Agency. A. J. Russell	9,627	.....	.....	1	43	.....	.....
Belleville Agency. J. F. Way, Agent.....	8,578	146	6,686	.....	.....	17,995	197,713
Western Timber District.....	.....	.....	.....	.....	.....	.....	.....
Total.....	18,205	146	6,686	1	43	17,995	197,713

G. B. COWPER,
Chief Clerk in Charge.

DEPARTMENT OF CROWN LANDS,
WOODS AND FORESTS BRANCH,
TORONTO, 31st December, 1879.

No. 10.

FORESTS.

Rent and Bonuses, during the year ending 31st December, 1879.

TIONS OF TIMBER.

White Pine.		Red Pine.		Boom and Dimension Timber.		Elm.		Ash.		Tamarac.	
Pieces.	Feet.	Pieces.	Feet.	Pieces.	Standards.	Pieces.	Feet.	Pieces.	Feet.	Pieces.	Feet.
29,049	1,552,291	16,096	623,454	15,335	24,701	.....	.....	5	231	6	234
2,093	125,211	.....	.....	8,060	8,145	8	336	53	2,340	.....	.....
3,624	193,151	117	4,757	9,896	17,574	22	1,141	.....	.....	.....	.....
34,766	1,870,653	16,213	628,211	33,291	50,420	30	1,477	58	2,571	6	234

OF TIMBER, &c.—*Continued.*

TIONS OF TIMBER.

Cordwood.		Posts & Shingle Bolts.	Round Cedar.	Telegraph Poles.	Amounts Accrued.					
Hard Cords.	Soft Cords.	Cords.	Feet.	Pieces.	Trespass, &c.	Timber Dues.	Ground Rent.	Bonus.	Total	
113	.....	29	75,365	1,358	\$ cts. 2,471 52	\$ cts. 137,998 84	\$ cts. 14,761 00	\$ cts. 1,971 24	\$ cts. 157,202 60	
.....	.....	782	15,312	.....	2,211 28	67,313 28	3,834 50	13 82	73,372 88	
146	35	1,616	.....	.....	6,144 54	79,018 10	14,460 00	12,696 57	112,319 21	
250	35	2,427	91,277	1,358	10,827 34	284,330 22	33,055 50	14,681 63	342,894 69	

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 11.

WOODS AND FORESTS.

STATEMENT of Revenue collected during the year ending 31st December, 1879.

	\$ cts.	\$ cts.
Amount of Ottawa collections, A. J. Russell.....	77,161 35	
" " McL. Stewart.....	73,096 45	150,257 80
Amount of Belleville collections, J. F. Way	61,900 32	
" " McL. Stewart	1,391 55	63,291 87
Amount of Western Timber District collections at Department.....	115,167 34	
" " McL. Stewart.....	3,297 46	118,464 80
		332,014 47

G. B. COWPER,
Chief Clerk in Charge.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
WOODS AND FORESTS BRANCH,
Toronto, 31st December, 1879.

APPENDIX No. 12.

List of Crown Timber Agents in the Province of Ontario, their Assistants, Names of Territories, Residences, dates of Appointments, and Salary allowed to each for his Services, during the year ending 31st December, 1879.

Names of Territories.	Names of Agents and Assistants.	Residence.	Date of Appointment.	Salary per annum up to 1st July, 1873.	Salary per annum from 1st July, 1873.	Remarks.
Upper Ottawa.....	A. J. Russell, Agent.... C. S. McNutt, Assistant..... J. Ritchie, Clerk	Ottawa City	1846, June 13..... 1858, April 13..... 1864, June 23..... 1867, April 1..... 1864, June 23..... 1871, August 1 ..	\$ 2,600 00 2,000 00 1,400 00 1,000 00 700 00 650 00	\$ 2,600 00 1,800 00 1,400 00 1,200 00 1,000 00	{ The Crown Timber Office, Ottawa, acts for the Provinces of Ontario and Quebec, and also for the Dominion of Canada, in the collection of slide-dues; the proportion of salaries chargeable to each Province and the Dominion not yet determined.
	E. T. Smith, Clerk	"	"	300 00	300 00	{ Additional to his salary of \$535 per annum from the Department of Public Works, Ottawa.
	J. Jackson, Messenger.....	"	"	"	"	{ During season of navigation.
	J. McDonald, Deputy Slide-master and Chief Timber-counter.	"	1846, May 8.....	85 00	*	
	James Steen, Timber-counter..... John Redmond, Assistant and Boatman.....	"	1861, May 27	\$2 per diem.	\$2 per diem.	
		"	"	"	"	
		"	1872, March 1.....	"	"	
Belleville Agency.....	Joseph F. Way, Agent	Belleville.....	1854, May 6..... 1867, December 1	1,440 00 500 00	1,440 00 500 00	{ The remarks in connection with the Crown Timber Office, at Ottawa, respecting salaries, apply to the Collector's Office at Quebec.
Collector at Quebec	J. A. G. Crozier, Clerk	Quebec.....	1845, September 27	2,000 00	2,000 00	Quebec.
	McLean Stewart, Collector.....	"	1861, June 1	1,200 00	1,200 00	
	John McKay, Assistant.....	"	1872, November 7	1,000 00	1,000 00	
	William Miller, Clerk	"				

* The Local Governments of Ontario and Quebec to pay Deputy Slide-master \$150 each, in addition to amount paid by Public Works.

G. B. COWPER,
Chief Clerk in Charge.

DEPARTMENT OF CROWN LANDS,
WOODS AND FORESTS BRANCH,
Toronto, 31st December, 1879.

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 13,

RETURN of the number of locatees and of acres located ; of purchasers and of acres sold to locatees ; of lots which have been resumed for non-performance of the settlement duties ; and of patents which have been issued—under the “Free Grants and Homesteads Act,”—during the year 1879.

TOWNSHIP.	DISTRICT OR COUNTY.	AGENT.	Number of Lots which have been cancelled.		Number of Lots which have been issued.
			Number of Acres located.	Number of Acres sold.	
Brunel			11 36 20	1,589 4,064 2,412	15 26 13
Chaffey			53	7,289	28 13
Draper			7	7,734	1
Franklin			27	4,104	21
Macaulay			2	201	17
Medora			4	722	7
Monck			11	1,579	3
Morrison			33	4,628	30
Muskoka	Aubrey White, Bracebridge		58	8,066	20
McLean			37	4,878	22
Oakley			34	4,814	2
Ridout			20	2,395	19
Ryde			34	4,396	2
Stephenson			9	915	17
Stisted			1	170	38
Watt			19	2,957	12
Wood			35	5,355	14
Cardwell			13	2,075	1
Carling			3	2,339	1
Christie			13	2,200	3
Ferguson	Hugh Mackay, Parry Sound		12	2,155	7
Foley			22	3,538	10
Hagerman			13	2,229	11
Humphry			7	1,049	19
Monteith			45	5,604	6
McDougal			33	4,437	38
McKellar			20	2,398	16
Chapman	Parry Sound		41	4,863	4
Croft				420	19
Ryerson					13
Spence	S. G. Best, Maganetawan				1

Armour	1	61	350
McMurrich	1	50	93
Perry	1	37	175
Parry Sound	2	50	6,629
Perry Sound	2	5	1
Peterborough	2	5	1
do	2	5	1
Haliburton	2	5	1
do	2	5	1
D. Anderson, Apsley	2	12	124
J. W. Fitzgerald, Minden	2	12	19
Haliburton	2	13	9
J. W. Fitzgerald, Minden	2	13	9
Anson	2	13	9
Glanorgan	2	13	9
Hinton	2	13	9
Lutterworth	2	13	9
Minden	2	13	9
Showdon	2	13	9
Stanhope	2	13	9
Bangor	2	13	9
Carlow	2	13	9
Dungannon	2	13	9
Farady	2	13	9
Herschel	2	13	9
Mayo	2	13	9
Monteagle	2	13	9
McClure	2	13	9
Wicklow	2	13	9
Abinger	2	13	9
Denbigh	2	13	9
Clarendon	2	13	9
Miller	2	13	9
Palmerston	2	13	9
Alice	2	13	9
Buchanan	2	13	9
Fraser	2	13	9
Head	2	13	9
Petawawa	2	13	9
Rolph	2	13	9
Wylie	2	13	9
McKay	2	13	9
Mattawan	2	13	9
Algoma, South	2	200	200
Do North	2	300	1,914
Grattan	2	600	600
Haggarty	2	796	796
Richards	2	600	600
Sherwood	2	700	700
Wilberforce	2	18	18
James Reeves, Eganville	2	10	10
Renfrew	2	5	5
Renfrew	2	5	5

APPENDIX No. 13.—Continued.

RETURN of the number of loctees and number of acres located, &c.

TOWNSHIP.	DISTRICT OR COUNTY.	AGENT.	Number of Persons located.	Acres located.	Number of Purchasers.	Acres sold.	Number of Lots the locations of which have been cancelled.	Number of Lots issued.	Patents issued.
Brougham			2	1563				1	12
Brudenell			7	633					3
Griffith			2	226					1
Lyndoch			2	315					2
Radcliffe			5	600					
Raglan			3	473 ¹					
Sebastopol			3	197					
Matawachan									
St. Joseph's Island			130	14,886	6	592	50	1	
Plummer			13	1,972				8	
Awerns									
Korah			9	1,262	1	40		5	
Parke			5	605	1	40		1	
Prince			12	1,793					
Blake									
Dawson Road			2	320				2	
Oliver			3	307				51	
Paiipoonge			61	9,763				6	
Thunder Bay			5	701					
Total			1,506	199,500	123	4,911	1,018	513	

JOSEPH J. MURPHY,
Clerk in Charge.

THOS. H. JOHNSON,

Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1879.

APPENDIX No. 14.

STATEMENT of Crown Land Surveys completed and closed during the year 1879.

No.	Date of Instruction.	Name of Surveyor.	Description of Survey.	Amount Paid.	No. of Acres.
1	15th Sept., 1873..	F. F. Passmore	Certain Water Lots in the City of Hamilton	\$ 90	80
2	23rd April, 1878..	Alexander Niven	Township of Nightingale	392	46
3	22nd May, 1878..	James Dickson	“ Finlayson	1,988	60
4	11th June, 1879..	Thomas Byrne	“ Mowat	5,062	12
5	12th June	C. F. Chapman	“ McCraney	3,475	99
6	14th June	James Dickson	“ Ballantyne	3,488	38
7	12th June	“ J. K. McLean	“ Paxton	3,523	66
8	14th June	“ Lewis Bolton	“ Bright & Bright additional	1,394	96
9	14th June	“ M. J. Butler	“ Gladstone	1,599	36
10	14th June	“ G. B. Abrey	“ Day	1,436	96
11	17th June	“ Elihu Stewart	“ Parkinson	1,620	99
12	23rd June	T. O. Bolger	“ Wells	1,631	00
			26th February, 1879, paid J. C. Smith for maps of Huron and Ottawa Territory	430	00
			28th March, paid Rolph, Smith & Co. for lithographing 500 plans of Townships	137	50
			21st April, paid Copp, Clark & Co. for lithographing plans of Townships	543	00
			9th July, paid Copp, Clark & Co. for maps of North Shore Lake Huron and Lake Superior	120	00
			19th Sept., paid Superintendent of Indian Affairs for map	30	00
			13th December, paid Thos. Shortend for exploring lands at Rainy River	108	05
			31st December, paid Copp, Clark & Co. for maps of North Shore Lake Huron	70	00
			31st December, paid Hart & Rawlinson for books	20	00
				27,173	78
					435,283

G. B. KIRKPATRICK.

THOS. H. JOHNSON,
*Assistant Commissioner.*DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1879.

APPENDIX No. 15.

STATEMENT of Crown Lands Surveys in progress on 31st December, 1879, and amounts advanced thereon up to date.

No.	Date of Instruction.	NAME OF SURVEYOR.	Description of Survey.	Amount Advanced.
1	11th June, 1879	David Beatty	Township of Wallbridge	\$ 5,000 00
2	12th June, 1879	J. J. McKenna	Township of Butt	3,000 00
				8,000 00

These surveys have been completed in the Field, but Final Returns not yet examined.

G. B. KIRKPATRICK.

DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1879.THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 16.

COMPLETE STATEMENT of Municipal Surveys for which Instructions were issued during the year 1879.

No.	NAME OF SURVEYOR.	No.	Date of Instruction.	DESCRIPTION OF SURVEY.	Date when Confirmed.
1	C. G. Hamming.....	472	10th February, 1879.....	Survey of Lots 1, 2, 3 and 4 in the 4th concession of Georgina.	5th June, 1879
2	W. E. Yarnold.....	473	12th February, ".....	" 8th concession of North Gwillimbury	
3	James S. Laird.....	474	1st April ".....	" Part of Concession Line between concessions 3 and 4.	
				Raleigh. Also part of Line between concessions 4 and 5, and the line between Lots 18 and 19 in	
				said Township	24th July, "
				" Lot 26 in 8th concession of Pickering	26th Nov., "
				" 5th, 6th and 7th concessions of Grimsby	Cancelled.
				" 5th, 6th and 7th concessions of Grimsby	
				" Lots 29 and 30 in 8th concession of Township of Scott.	
				" Line in front of Lots 12 & 13 in 7th con. of Cartwright.	
				" Lots 6 and 7 in 2nd concession of Arthur	
				" Lots 35 and 36 in 4th concession of Uxbridge	
				" Lots 33, 34 and 35 in 4th concession of Uxbridge	25th Nov., "
4	John Shier	475	21st July ".....		
5	Hugh Wilson	476	26th July ".....		
6	Thos. C. Brownjohn	478a	17th October ".....		
7	W. E. Yarnold	477	24th October ".....		
8	W. E. Yarnold	478	25th October ".....		
9	Lewis Bolton	479	28th October ".....		
10	C. G. Hamming	480	4th November ".....		
11	C. G. Hamming	481	26th December ".....		

G. B. KIRKPATRICK.

DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1879.THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 17.

STATEMENT of Municipal Surveys, confirmed during the year 1879.

No.	NAME OF SURVEYOR.	No.	Date of Instruction.	Description of Survey.	Date when Confirmed.
1	W. E. Yarnold	426	22nd May, 1876.....	Survey of Lots 19 and 20, in rear of the 2nd Concession of Thorah.	24th January, 1879.
2	H. Creswick	445	4th July, 1877	“ Lot 5, in 8th and 9th Concessions of West Gwillimbury.	29th “
3	Wm. Bell	471	15th November, 1878.....	“ part of line between the 5th and 6th Concessions of Ross.	4th February, “
4	C. G. Hanning	472	10th February, 1879.....	“ Lots 1, 2, 3 and 4, in 4th Concession of Georgina	5th June, “
5	W. G. McGeorge	453	8th September, 1877.....	“ Lots 7, 8, 9 and 10, in 2nd Concession of Howard.....	27th “
6	W. E. Yarnold	470	4th November, 1878.....	“ Lots 3 and 4, in the 11th Concession of Scugog	15th July, “
7	Jas. S. Laird	474	1st April, 1879	“ part of line between 3rd and 4th and 4th and 5th Concessions of Raleigh, and the line between lots 18 and 19.	24th “
8	C. G. Hanning	483	4th November, 1879.....	“ = Lots 35 and 36, in 4th Concession of Uxbridge	25th November, “
9	John Shier	475	21st July, 1879	“ Lot 26, in 8th Concession of Pickering	26th “

G. B. KIRKPATRICK.
DEPARTMENT OF CROWN LANDS,
TORONTO, December 31st, 1879.

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX NO. 18.

STATEMENT of Mineral Lands which have been patented in unsurveyed territory on the North Shores of Lakes Superior and Huron, in the Districts of Thunder Bay and Algoma.

No.	No. of Description.	PATENTEE.	DESCRIPTION OF MINING TRACT.	Acres.	Amount.	Date of Patent.
1	1132	Allen McQuarrie	Mining Location, Y 12, near the Township of Rutherford, North Shore of Lake Huron	87	87	13th March, 1879.
2	1145	Edward Sayer	Block of Land at Mouth of Mississaga River, North Shore of Lake Huron	556	556	24th June, 1879.
3	1147	Gardiner S. Moore.	Mining Location, 24 T (90 $\frac{3}{4}$ ac.), on Eagle Island, Northern Light Lake, and 25 T, Northern Light Lake (78 $\frac{3}{4}$ ac.), Thunder Bay District	168 $\frac{6}{100}$	168 $\frac{6}{100}$	24th July, 1879.
4	1150	Gardiner S. Moore.	Mining Location 28 T, North of Arrow Lake, Thunder Bay District	127 $\frac{8}{100}$	127 $\frac{8}{100}$	4th Aug., 1879.
				938 $\frac{8}{100}$	\$938 $\frac{8}{100}$	

G. B. KIRKPATRICK.

DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1879.

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 19.

STATEMENT of Work performed in the Survey Branch during the year 1879.

No.

- 1.—11 Instructions and Letters of Instructions for Surveys prepared and entered.
- 2.—12 Crown Surveys examined, completed and closed.
- 3.—12 Surveyors' accounts for surveys audited and closed.
- 4.—11 Reports to Council relative to Municipal Surveys drawn up and entered.
- 5.—11 Instructions for Municipal Surveys prepared and entered.
- 6.—9 Municipal Surveys examined and confirmed.
- 7.—4 Plans of Mining Locations examined.
- 8.—93 Plans of Private surveys examined.
- 9.—78 Plans to accompany Instructions prepared.
- 10.—567 Plans compiled and copied, besides Plans of Townships reduced and added to the engraved Maps.
- 11.—510 Letters relating to Surveys prepared, written and entered.
- 12.—21 Letters relating to Mining prepared, written and entered.
- 13.—2,139 Pages of Field Notes, &c., copied.
- 14.—81 Railway Plans and Books of Reference examined and certified.
- 15.—1,384 Patents issued during the year ending 31st December, 1879.

NOTE.—The foregoing Statement does not account for the time spent in furnishing information to parties applying personally at the Surveyor's Branch, who are unable to gain the information they require without assistance; much careful research into the old correspondence, plans, field notes, and other documents being necessary in order to insure reliability in the information given, which is frequently used as legal evidence in courts of law in disputed cases.

G. B. KIRKPATRICK.

DEPARTMENT OF CROWN LANDS,
TORONTO, 31st December, 1879.

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 20.

STATEMENT of the Names of Candidates who have passed their Examinations before the Board of Examiners of Land Surveyors for Ontario during the year 1879.

PRELIMINARY CANDIDATES PASSED.

Fletcher Huffman.
William Lyon Mackenzie.
Norval Wardrop.
Hugh McGrandle.

Robert William Coldwell.
Walter Stanley Davidson.
Daniel Leavens Sanderson.
Arthur Jabez Van Nostrand.

FINAL CANDIDATES PASSED AND SWORN IN AS PROVINCIAL LAND SURVEYORS.

Josiah Gershom Sing,
Richard Birdsall Rogers.
Charles Edward Fitton.
Alfred Edmund Morris.
Clemens Dersteine Bowman.

Archibald Westmacott McVittie.
George Ross.
Richard Coad.
John McKenzie Moore.
John Duncan McNab.

The Board of Examiners of Land Surveyors for Ontario meets at the Office of the Commissioner of Crown Lands, on the first Monday in each of the months of January, April, July and October in every year, unless such Monday be a holiday (in which case it meets on the day next thereafter, not being a holiday). Section 6, chapter 146, Revised Statutes of Ontario.

PRELIMINARY EXAMINATION.

All persons before they can be apprenticed to a Provincial Land Surveyor must pass a satisfactory examination before the Board of Examiners in the following subjects, viz. :—Vulgar and Decimal Fractions, Extraction of Square and Cube Root, Practical Geometry, Euclid, Plane and Spherical Trigonometry, Mensuration of Superficies, and the use of Logarithms ; correct Spelling and good Writing required.

FINAL EXAMINATION.

Final candidates, before obtaining a license to practise, undergo a strict and searching examination before the Board of Examiners as to their proficiency in Euclid ; Plane and Spherical Trigonometry ; Calculation of Areas by means of the Traverse Tables, &c. ; Laying out and Dividing up of Land ; the Adjustment and Use of the Transit or Theodolite ; Astronomy, including the calculations necessary to determine the Latitude by meridian altitudes of the sun, moon or stars, or by double altitudes ; Method of determining Time ; of finding the time when any star passes the Meridian, with the time of its Elongation, Azimuth Angle and Variation of the Compass ; the Method of Keeping Field Notes ; Drawing up Descriptions by Metes and Bounds for insertion in Deeds ; taking Affidavits in the matter of disputed Boundaries ; the Law regulating Surveys ; Geology ; and also as to their proficiency as Draughtsmen.

G. B. KIRKPATRICK.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
TORONTO, December 31st, 1879.

APPENDIX No. 21.

REPORT
ON
COLONIZATION ROADS AND BRIDGES,
FOR THE YEAR 1879.

To the Honourable T. B. PARDEE,
Commissioner of Crown Lands.
Ontario.

SIR,—I have the honour to present for your information, my report of the works performed during the year 1879, under the direction and management of the Colonization Roads Branch of your department:—

I beg, in the first place, as a preliminary statement, to append a schedule of the detailed expenditure of the sum of \$2,720⁵⁰ ₀₀, referred to in the Recapitulation of my report for 1878, as the amount remaining in the hands of the Accountant of the Department of Crown Lands, for “current works and balances of unsettled accounts” and which amount has since been drawn out and applied in the manner above indicated, as follows:—

Seguin River Bridge (in McDougall).....	\$500 00
Perrault's Settlement Road.....	76 42
Inspections.....	600 00
Tamworth and Oso Road.....	51 50
Peterson Road.....	32 22
Monck Road.....	36 10
Addington Road.....	62 12
Mississippi Road.....	37 75
Honora Bay Road.....	39 16
Hagarty Road.....	51 93
Eganville and Foy Road.....	25 50
Burk's Falls Bridge.....	100 00
Stisted Road.....	121 69
Hagarty and Brudenel.....	50 50
Lavant Road.....	61 50
Combermere Bridge.....	770 21
Parry Sound Road.....	20 53
Rose and Lefroy Road.....	23 91
Chaffey Town Line Road.....	56 66
Draper Bridge.....	2 81
	<hr/>
	\$2,720 10

I have now the honour to present to your notice a brief description of the various works of the year 1879:—

These works have been unusually numerous this season. The influx of settlement into the new Districts has necessitated an increase of road and bridge improvements, to accommodate in some degree the wants of the settlers.

I now proceed to enumerate the works of the past year with the amounts expended on each, as follows:

NORTH DIVISION.

1. BASE LINE ROAD.

Two and a half miles of this line have been completed in a thorough manner, extending from section No. 32 in Korah, through section 36, in the township of Prince. The road has been ditched, heavily brushed and covered.

Expenditure \$1,038.35.

2. BASE LINE BRANCH.

This branch runs a mile north of the above road. The work done this season is from one half mile east of Prince and Korah town line west three and a half miles. The road is graded, ditched and turnpiked, and extends to the west side of sections 27 and 34 in the township of Prince.

Expenditure, \$500.

3. BATCHAWAUNG ROAD.

The work on this road was commenced at section No. 3, in the township of Pennefather, thence in a northerly direction through the township of Fenwick, and a short distance into the township of Tupper.

The whole length of road made this season, is eight miles and twenty-three chains. The land passed through, for the most part, is a tamarac swamp, and comprises mainly, the flats of Goulais River. The Indian Department contributed \$1,000 towards this work.

Expenditure, \$2,078.64.

4. BRUCE MINES ROAD.

This road has been repaired throughout its entire length. Seven miles have been wrought over. This road connects with the Great Northern road, at Thessalon River.

Expenditure, \$280.00.

5. OTTER TAIL LAKE ROAD.

This line extends from the bridge at the head of Otter Tail Lake, in a northerly direction through the township of Plummer, into the township of Galbraith. It opens up several good tracts of land. Five miles of new road have been built this season.

Expenditure, \$750.00.

6. ROCK LAKE ROAD.

This road branches off from the last named road near Otter Tail Lake, and runs in a north-westerly direction between Rock and Desert Lakes.

It opens a valley of good land lying between the above lakes.

Three miles of new road have been made this season.

Expenditure, \$450,00.

7. ROSE AND LEFROY ROAD.

Ten miles of this road have been repaired. Two miles of new road have also been made in connection herewith, on the town line between Lefroy and Plummer, forming an outlet for certain settlers to the Rose and Lefroy roads.

Expenditure, \$353.10.

8. ROSE AND LEFROY ROAD BRIDGE.

This bridge is situated on the above road where it crosses the Thessalon River, between sections 11 and 14 in Lefroy. The bridge is 144 feet long, supported by king post truss.

In connection with this bridge on either side of the river about one mile of road has been made.

Expenditure, \$250.00.

9. BRIDGE IN LEFROY.

This is another bridge across the Thessalon River, situated about three miles above the one last described.

This bridge is 119 feet long and 46 feet in span, also supported by a king post truss. Expenditure, \$150.00.

10. CAMPMENT D'OURS ROAD (ST. JOSEPH ISLAND).

The expenditure here has been made in opening the line between Cons. D and E, from the Centre Road to Campment d'Ours Island, as a winter road.

Expenditure, \$520.35.

11. GORE BAY ROAD (MANITOULIN ISLAND).

This line has been opened and made passable between Gore and Providence Bays.

It forms a very important connection between the north and south shores of the Island of Manitoulin.

Seventeen and a half miles of new road have been made this season, and two and a half miles of the old road have been repaired.

Expenditure \$1933.17.

12. GREAT NORTHERN ROAD.

Eight miles of this road have been repaired this season. The work was commenced at Desert Lake and extends westerly over the above distance. Ditching, grading, removal of boulders, and repairs of crossways form the principal improvements.

Expenditure, \$669.47.

13. HONORA BAY ROAD.

This road is a connecting one between Little Current and Gore Bay Roads.

Seven miles and a half have been opened for travel this year. The Indian Department contributed \$350 towards this work.

Expenditure, \$700.

14. HILTON OR CENTRE ROAD (ST. JOSEPH ISLAND).

Some three miles of this road have been opened this season, leading towards Hilton Road proper.

Expenditure, \$501.32.

KILLARNEY ROAD.

About four and a half miles of this road have been opened in a north-easterly direction.

The road passes through rough, rocky land, but leads in the direction of a fine tract, distant from the village about ten miles. It also affords access to certain beaver meadows where the settlers procure their hay.

Expenditure, \$593.85.

16. KAMINISTIQUIA ROAD.

The overseer on this line has opened the road through to the Murillo Station, on the Canada Pacific Railway.

Four and a half miles of new road have been built, and the remainder of the line, about seven miles, improved and made passable to the above station.

Expenditure, \$995.70.

17. LITTLE CURRENT ROAD.

Five and a quarter miles of this road have been substantially repaired. Some heavy hills on the line have been graded down, and a good portion of crossway side-ditched and covered.

Expenditure, \$864.92.

18. MANITOWAUNING ROAD.

Twelve and a half miles of this road have been repaired this season, from the village of Manitowauning towards Michael's Bay.

This road passes through a large tract of good land, and is the great highway from the above village to the south shore of the island.

Considerable additional repairs have also been made on the southerly portion of this road by R. A. Lyon, Esq., M.P.P., at his own expense.

Expenditure, \$523.10.

19. MUDGE BAY ROAD.

This is a short connecting road between the above named Bay and Lake Kagawong. It opens up accommodation between the above points for the settlers to grist and sawmills, store and post office. It opens also a fine tract of land. The timber on the line was very heavy, and the work expensive. The distance of road made is two and a half miles.

Expenditure, \$780.27.

20. MILFORD HAVEN ROAD.

This is a projected road from the town plot of Hilton to the above-named harbour, on St. Joseph Island.

Five hundred dollars were granted last fall to be expended in cutting out the timber from the line, in order that certain destitute settlers, whom it was reported were in a starving condition, might be given labour and wages to aid them under such circumstances. See report of last year.

Expenditure, \$250.

21. OLIVER ROAD.

This is an important leading road commencing at Prince Arthur's Landing, in the Thunder Bay District. The line runs in nearly a direct course through the Township of McIntyre, to the intersection of the townline between Oliver and McIntyre, with the line between the first and second concessions of Oliver.

The distance wrought over has been in all about ten miles, seven of which has been completed as a wagon road and three have been chopped and cleared of timber sufficient for a winter road.

The corporation of Prince Arthur's Landing contributed one hundred and thirty-four dollars towards the building of one half mile of road within the bounds of the village being one half the cost of the said half mile.

Expenditure, \$2,977.31.

22. PORT LOCK HARBOUR ROAD.

This line commences at Port Lock Harbour, west of Bruce Mines some seven or eight miles, and runs northward towards Mud and Desert Lakes. The road has been opened as far as the south end of the Mud Lake, a distance of about four miles.

The main object of this road is to afford accommodation to the settlers in the vicinity of Desert Lake to reach the Port Lock Harbour direct.

Expenditure, \$1,260.24.

23. PIGEON RIVER ROAD.

This road has been improved in some considerable degree throughout its whole distance, thirty miles, or from the Kaministiquia to Pigeon River, the boundary of the Province of Ontario.

The improvements consist of crossways over all the small streams and wet swamps, brushing and clearing the line and removal of fallen timber.

A large amount of work has been done, and the road is now fit for winter mail travel.

Expenditure \$981.70.

24. SANFIELD BAY ROAD.

This line leads from Manitowanning Road to Manitou Lake. The whole distance is now opened.

Five and a quarter miles have been made this year, affording access to the mills on Manitou Lake.

Expenditure, \$542.10.

25. TENBY BAY ROAD.

Five miles of this road have been constructed, commencing at Hilton Town Plot, and extending southward. This is the same line which was called at first "Milford Haven." It was found subsequently more advantageous to settlement, to diverge this road from the Haven at the U concession line south-westward towards Tenby Bay, and hence the name of the road is changed to Tenby Bay.

Expenditure, \$696.39.

26. THESSALON RIVER ROAD.

This road commences at the outlet of Thessalon River, at Diament's mill, and extends up the said river a distance of five and a half miles.

This improvement affords a very large amount of convenience to the settlers in Lefroy and Rose and Kirkwood, giving them access to mill and store at the mouth of the river. Of the amount expended, the Indian Department contributed \$500, towards the works.

Expenditure \$1,056.18.

WEST DIVISION.

AHMICK LAKE ROAD.

Three and a half miles of this road, or its total length from the northern road to the above lake, have been repaired.

Expenditure, \$250.

2. ARMOUR ROAD.

This line has been extended this season a further distance of three and a half miles. The road now reaches within three-fourths of a mile of Pickerel Lake in the above township.

The work is described as tolerably well done.

Expenditure \$1,001.87.

3. BURK'S FALLS BRIDGE.

This bridge spans the north branch of the Maganetawan River. It is a well-built king-post truss bridge of 60 feet span. The Ontario Junction Railway location crosses close to this point.

There is also an excellent mill site here. This will probably, for the above reasons, shortly become a place of more than ordinary importance.

Expenditure \$648.59.

4. BETHUNE BRIDGE.

This is a structure built on what is called the Kearney Branch Road. The bridge is located on the town line between the townships of Bethune and Proudfoot, where it is intended the above branch road shall cross the stream.

It (the bridge) spans the south branch of the Maganetawan. It is similar to the Burk's Falls bridge, except in the piers, which are greater in altitude.

Expenditure \$800.

5. BRUNEL ROAD.

The part of this road embraced in the expenditure, extends from the commencement of this road on the Muskoka road, at the village of Utterson, and extends to Port Sydney, on Mary's Lake, and on the southward from thence to the Brunel bridge, which crosses the north branch of the Muskoka River just below Mary's Lake.

The distance repaired is three miles. The work is well done, and the road is now in excellent condition for travel.

Expenditure, \$349.12.

6. CHRISTIE ROAD.

This road has been repaired in all the more dilapidated sections from its commencement on Parry Sound Road for a distance of fourteen miles eastward, towards the Rosseau and Nipissing road.

The improvements have been judiciously made.

Expenditure \$1,036.18.

7. CARDWELL Road (New Branch).

This branch settlement road diverges from the Cardwell road proper on the town line between Cardwell and Stisted, and extends, in a north-westerly course, into the township of Monteith.

Four miles and twelve chains of new road have been made in a very superior manner, besides some very necessary repairs to the older portion of the road opened last year
Expenditure \$945.87.

8. CEDAR NARROWS BRIDGE.

This bridge is built at the outlet of a small lake, which empties into Trading Lake upon the Bobcaygeon Road. This bridge is built in a very superior manner. It is built sufficiently high to admit the small steamer that plies between a mill situated some distance above it and the village of Baysville, about two miles below the western end of the Lake of Bays.

The bridge is 200 feet in length; the span is 60 feet, and is supported by a king post truss.

Expenditure, \$1,052.25.

9. DALTON AND WASHAGO ROAD.

This line is now completed from its commencement on Muskoka Road, near the Village of Washago, to the Victoria Road in the township of Dalton. Four miles have been made this year.

Expenditure, \$982.97.

10. EAGLE LAKE ROAD.

This is a new road leading from the Rosseau and Nipissing road to the narrows of Eagle Lake, in the Township of Machar. The length of the line to the Narrows is seven miles.

Two miles of this distance, from the Rosseau and Nipissing road, is grubbed and graded as a summer road; the rest of the distance, five miles, is only chopped out and logged, and formed as a winter track.

Expenditure, \$1,081.09.

11. EAGLE LAKE BRIDGE.

This bridge was built by contract.

It is built across the Narrows alluded to in the foregoing work, and forms an entire length of 361 feet.

There is a span of 40 feet over the deep water portion of the narrows. The rest of the distance on either side of the span is passed on a series of framed bents or tressel work, well braced and strongly hand railed on both sides throughout the entire length.

Expenditure, \$800.

12. FOURTH CON. LINE (BRUNEL).

This line has been opened from the Port Sydney Road, a distance eastward of three and a half miles.

The first two miles of the above distance are very well completed.

The last one and a half miles are not so well finished.

Expenditure, \$500.

13. GURD ROAD.

This road has been prolonged this season a distance of six miles and twenty-eight chains. It reaches now to lot 34 in the Township of Himsworth.

The whole length of line now opened is about eleven and a half miles, from Commanda Creek on the Rosseau and Nipissing Road to the above lot 34. The road built this season is of a very superior character.

The road now extends to the east side of the South River; a bridge over which is very much needed by the settlers.

Expenditure, \$1021.92.

14. GRAVENHURST AND BAYSVILLE ROAD.

This is a new road located in 1878. It leads from a point about two miles west of Baysville Village, on the Macaulay Road, southward through the townships of McLean and Draper, and is intended to connect with the roads south of Peterson Road so as to form a nearly direct line to the village of Gravenhurst.

Thirteen miles of the line have been opened. Ten miles of this distance is new road and three miles are distances taken up on settlers roads lying in the same course. These last have been improved.

The line has been only completed as a winter road.

Expenditure \$1,012.73.

15. INDIAN PENINSULA ROAD.

This is a line of road opened through the townships of Eastnor and Lindsay, near Colpoys Bay, to assist the settlers in the Indian Peninsula, in the County of Bruce. The statute lines have mainly been adhered to. Seven miles have been worked over and made fit for travel this season.

Expenditure, \$800.81

16. JUNCTION No. 1 ROAD.

The easterly end of this road from its junction with Rosseau and Nipissing road in the township of Spence, has been improved westward a distance of four miles.

The work is tolerably well done.

Expenditure, \$580.24.

17. KEARNEY'S BRANCH ROAD.

This road branches from the Perry and Monteith road, at Kearney Post Office, in Perry, and extends northward towards the town line between Bethune and Proudfoot, where the new Bethune bridge, formerly described, crosses the Maganetawan River.

Only one-and-a-half miles of this road are graded and finished. A further distance of two or three miles has been chopped out, but that portion is at present useless for travel.

Expenditure, \$999.62.

18. KATRINE BRIDGE.

This bridge is built over the south branch of the Maganetawan River, on the Armour road. It is similar to the bridge built at Burk's Falls. It is an excellent structure and has been gratefully received by the settlers as an immense boon to that section of the country.

Expenditure, \$876.40.

19. MUSQUOSH ROAD.

Considerable repairs have been effected on this line which had been urgently petitioned for the past two years.

The part improved is from the sixth mile post from Gravenhurst to Glen Orchard post office, a distance of eleven miles and a half. The repairs are very well performed considering the great distance passed over and the limited amount expended.

Expenditure, \$806.20.

20. MUSKOKA ROAD, No. 1.

Permanent repairs have been made upon this road, reaching from the village of Bracebridge past the junction of the Parry Sound Road, a distance of six miles. In this distance a great deal of heavy hill work has been done.

The hills are very numerous on this part of the road, and a very superior improvement of them is reported by the Inspector.

The road is also heavily graded throughout the distance, and substantial culverts placed wherever needed.

Expenditure, \$3,541.53.

21. MUSKOKA ROAD, No. 2.

The Muskoka Road has been further extended this year through new lands from Burk's Falls to the boundary of Strong, a distance of four-and-a-half miles.

The road has been built upon "Specification No. 2, improved," and is reported by the Inspector to be very well done indeed.

Expenditure, \$1,226.69.

22. MUSKOKA ROAD, No. 3.

The improvement under this head consists mainly of several deviations made from the old line to avoid high, rocky, and very difficult hills. Two and three-quarters miles of nearly all new road have been thus made, forming a very essential improvement. The hills are all north of Huntsville, and chiefly in the township of Chaffey.

Expenditure, \$1,266.46.

22. MONTEITH AND PERRY ROAD, No. 1.

This road has been repaired from Rosseau and Nipissing Road eastward over the distance of eight miles.

The repairs are comparatively of a superficial character owing to the small sum expended and the great distance wrought over.

They are, however, reported to be judiciously made, and render this part of the road very passable for teams. It was formerly all but impassable.

Expenditure, \$528.60.

24. MONTEITH AND PERRY ROAD, No. 2.

This road has been extended for two and a half miles further eastward into the township of Bethune.

The work was commenced at Kearney Post Office, and was prolonged into the new township of Bethune.

Very many settlers have moved into this township last year, and the line upon which this road is built is represented as being located far in advance of the terminus of the road.

Expenditure, \$497.20.

25. MACAULAY ROAD.

The Macaulay road has been prolonged a further distance toward the Cedar Narrows in the township of Ridout. The terminus of the work now reaches to the south side of St. Mary's Lake, within three miles of the Narrows.

Four miles have been built this season. The work is reported to be exceedingly well done.

Expenditure, \$990.03.

26. MILLS ROAD.

This road branches from the Northern road at lot 27, in the 10th concession of Ferrie. It proceeds from the above point in a northerly direction through the township of Mills, crossing Wolf River at lot 24, in the 3rd concession of the last named township. Eight miles of the line have been opened, reaching four miles beyond the river.

The road has been well made, but the location is described as being exceedingly hilly and rough.

A bridge is imperatively required over Wolf River.

Expenditure \$2,012.87.

27. MAGANETAWAN ROAD.

About one mile of this short road has been repaired between Rosseau and Nipissing Road and the Distress River.

Expenditure \$254.54.

28. NIPISSING EXTENSION ROAD.

Six miles of this line have been wrought over ; commencing at South River, and extending easterly towards South-East Bay. Two-and-a-half miles of the above distance is completed as a wagon road. The remaining three-and-a-half miles is only brushed out as a winter sleigh track.

The work is described as tolerably well done.

Expenditure \$501.01.

29. NORTHERN ROAD, No. 1.

Permanent improvements have been made on this road over a distance of three miles and fourteen chains. This distance lies southward of the village of McKellar.

The improvements embrace first a deviation from the latter point of sixty chains in length.

On this deviation there are two trestle bridges, one, one hundred and eighty feet long, and another sixty-six feet long. The second deviation is forty chains in length. On it there is one log bridge sixty feet long.

Some repairs have also been made over about three miles of the road still further southward.

The above distance of three miles and fourteen chains have been heavily ditched and graded, and supplied with thirty-six culverts.

Expenditure \$3,191.78.

30. NORTHERN ROAD, No. 2.

The repairs made under this head embrace a distance of twelve miles on the Rosseau and Nipissing end of the line. They consist of the building of three log bridges, clearing brush and some side ditching. Some crossways also have been improved.

Expenditure \$550.

31. NORTH-WEST ROAD.

This road has been extended four miles further towards Shawanaga. These four miles have been well completed. A further distance of three-quarters of a mile have been brushed out.

Expenditure, \$937.33.

32. ORANGE VALLEY ROAD.

This road begins on the Rosseau and Nipissing Road, in the 5th concession of the township of Spence.

It has been opened in a westerly direction three and a half miles.

The road is reported as tolerably well made.

Expenditure, \$974.63.

33. OTTER LAKE ROAD.

Two and a half miles have been built on this line, extending southward from the operations of last year.

The work is reported to be very well performed.

Expenditure, \$421.

34. PORT VERNON ROAD.

This line leads southward from the Village of Port Vernon, at the head of Vernon Lake, in the Township of Stisted. The road has been extended a distance of two miles through new lands. Two miles, also, of the old road near the village have been repaired.

Expenditure, \$695.54.

35. PORT SYDNEY AND MUSKOKA ROAD.

This is a line leading direct from the boat landing, at the foot of Mary's Lake, to the Muskoka Road, which it enters about a mile south of Utterson. About two miles of the line have been repaired.

One and a half miles of this distance is continuously repaired and the remaining half mile in the worst places.

The object of this road is to afford more direct accommodation to boat passengers to Bracebridge.

Expenditure, \$224.98.

36. PARRY SOUND ROAD.

The repairs made this season are on the easterly division of this road, between Rosseau Village and the Muskoka Road Junction.

Eight miles have been improved. Two miles from Rosseau have been permanently repaired, and the remaining six miles have been made passable.

Expenditure, \$1997.02.

37. POVERTY BAY ROAD.

This road commences at the Maganetawan Village, on Rosseau and Nipissing Road, and leads to some settlements westward in the township of Croft.

About three-and-a-half miles have been opened.

Expenditure, \$1007.47.

38. PENINSULA ROAD.

The Peninsula Road in the township of Medora, has been prolonged two miles further. The work is reported as being well done. The line now reaches to within a short distance of the north town line of Medora.

Expenditure, \$507.

39. PORT SYDNEY ROAD.

This road has been prolonged about half-a-mile along the shore of a small lake south of Stephenson town line, and also through a tamarac swamp.

Expenditure, \$189.47.

40. ROSSEAU AND NIPISSING ROAD.

About seven miles of permanent repairs have been made on this road, reaching to within a short distance of Commanda Creek, in the township of Gurd.

Besides these permanent repairs, improvements were made southward, from the Maganetawan, over the worst parts of the road, a distance of eight miles.

Expenditure, \$4,179.03.

41. SEGUIN RIVER BRIDGE.

This is a bridge constructed over the Seguin River on the Macdougall road. It is a good king-post bridge of 60 feet span, built by contract.

Expenditure, \$250, balance of account.

42. STEPHENSON ROAD.

This road has now been opened from the Muskoka Road to the west bay of the Lake of Bays.

Five miles have been built this season completing the line to the above point.

The work is reported as being well performed.

Expenditure, \$1,029.56.

43. STEPHENSON BRIDGE (*repairs*).

Some very important repairs have been made on this structure.

The water had undermined the easterly pier and wing wall to a very serious extent. The east bank is composed of running sand, and it has been found very difficult to secure it against damage.

The improvements to the bridge this season are the best and most permanent yet effected.

Expenditure, \$335.

44. SOUTH RIVER BRIDGE.

This bridge is constructed over the south river on the Rosseau and Nipissing road. The total length of this bridge is 200 feet. The main span is 80 feet in length and is supported by an excellently framed queen post truss.

The whole structure is reported as finished in a superior and workmanlike manner.

Expenditure, \$1,145.00.

45. STISTED ROAD.

Five miles and three-quarters of this road have been repaired. The repairs were taken up this season where they ended last year, and were continued to within a short distance of the south town line of McMurrich.

The work is reported as being satisfactorily done.

Expenditure, \$497.88.

46. SINCLAIR AND CHAFFEY (TOWN LINE ROAD).

This work lies between a point called Maud Broad, on the above line, and Winters settlement.

Some three miles of the line have been improved making a passable road between the above points.

Expenditure, \$256.28.

47. SCOTIA ROAD.

This is a short but important piece of road, for the convenience of the settlers in Perry and Bethune to reach McGill's grist and saw mill in Perry.

The line branches from the Monteith and Perry Road at Kearney's Post Office, and leads soutward to the above mills.

Two and three-quarters miles have been made in a satisfactory manner.

Expenditure, \$500.

EAST DIVISION.

1. ADDINGTON ROAD, No. 1.

The overseer has gone over a very long distance on this road.

He has repaired fifteen miles, commencing at Cloyne Post Office, and terminating at Massanoga Bridge.

The work is reported as tolerably well done, and the road is described as being in a very passable condition throughout.

Expenditure, \$1,021.88.

2. ADDINGTON ROAD, No. 2.

Four and a half miles of that part of this road, lying north of Madawaska bridge have been improved.

The work was commenced at the Peterson Road intersection, and was prolonged southward over the above-named distance.

A log bridge, about one and a half miles north of the Madawaska River, which had been destroyed by fire, was also rebuilt.

Expenditure, \$825.56.

3. ADDINGTON ROAD, No. 3.

Nine miles of this road were also repaired southward from Cloyne Post Office, and are reported as very well performed.

Expenditure, \$447.57.

4. ADMASTON ROAD

Under the above head twelve miles of road have been repaired on the road leading from Renfrew to Douglas, commencing three miles west of Renfrew and ending one mile east of Douglas.

One log pier bridge has been built within this distance, two hundred and fifty feet long. Besides the above work, two-and-a-half miles of the line between lots 18 and 19, across the 6th and 7th concessions, have been substantially repaired, making in all four-and-a-half miles of road repaired this season.

Expenditure, \$997.45.

5. ALGONA AND HAGARTY ROAD.

This work is done first on the line between the second and third concessions of the township of Hagarty, viz:—from lot eight eastward to townline. Again, the same line continued in Algona on the Eganville Road two miles further eastward.

Altogether, four miles.

Expenditure, \$481.71.

6. BOBCAYGEON ROAD, No. 1.

The work on this road is done in two sections.

First, Commencing at the village of Kinmount and extending to the village of Minden, twelve miles, and

Second, commencing at lot 20, in the township of Stanhope, north of the Peterson Road, and ending at lot 30 in the same township, two-and-a-half miles, in all, fourteen-and-a-half-miles.

This work is reported as being well done, especially the greater distance, between Kinmount and Minden.

Expenditure, \$2,051.79.

7. BOBCAYGEON ROAD, No. 2.

Some repairs have also been made south of Kinmount Village.

Seven miles have been improved on this section by grading, drainage, and repairs of crossways.

Expenditure, \$272.02.

8. BUCKHORN ROAD.

Repairs have been made on this road in the north part of Harvey and the southerly part of Cavendish.

Two-and-a-half miles have been improved, including in the same distance thirty-three rods of crossways.

Expenditure, \$225.62.

9. BARRIE ROAD.

The work here was commenced three-and-a-half miles from the Addington Road, or at the terminus of last year's work. Two-and-a-half miles were opened. The grading of the road is not nearly completed.

Expenditure, \$450.91.

10. BAGOT ROAD.

This improvement was commenced at the boundary line between Bagot and McNabb thence westerly along the northerly bank of the Madawaska river, or what is called the Old Madawaska Road, nine and three-quarter miles. Two-and-a-quarter miles of the road are reported as being exceedingly rough and stony, and expensive to improve.

Expenditure, \$815.93.

11. BURLEIGH ROAD.

Sixteen miles of this line, from Monek road, southward, have been partially repaired. The work consisted of repair of broken crossways, grading and drainage.

Expenditure, \$769.10.

12. CHANDOS ROAD.

Five miles of this road have been repaired, commencing at the Burleigh road, with which it connects, thence eastward toward Crow river, the present terminus of the road.

Eighty-two rods of crossway were also built within the above distance.

Expenditure, \$430.

13. CAMERON ROAD.

The repairs on this road were commenced at the village of Coboconck and extended from thence two miles.

Then again commencing at Moore's Falls, they were carried through to the village of Minden. This latter distance is twelve miles, making in all a total distance of fourteen miles repaired.

Expenditure, \$999.49.

14. COBDEN ROAD.

The work on this road this season consists, 1st, of three and a quarter miles of graveling. From Cobden Village westward, two miles have been gravelled, and again from the village of Oceola one and a quarter miles.

2nd. Three miles, in addition to the above distances, have been repaired by grading, drainage, etc. ; six and a half miles improved in all.

Expenditure, \$1,000.64.

15. CARDEN ROAD.

About 6 miles of this road have been repaired.

The road follows mainly the line between the 8th and 9th concessions.

Considerable work on the above distance has been done across a beaver meadow, where the road has been heavily ditched and gravelled.

Expenditure, \$150.

Besides the above work 6 miles of another line were repaired in the same township.

Expenditure, \$150.

16. DENBIGH ROAD.

This road begins on lot 20, Addington Road, in the township of Denbigh. The course of the road from this point is in a north-easterly direction.

Four miles of the line have been opened this season. The work is tolerably well done and generally well graded.

Expenditure, \$1,046.04.

17. DEER LAKE ROAD.

This road is in the township of Cardiff.

It commences on the Monck Road on lot 16 in the 12th Concession. It passes from thence in a north-easterly direction to the 21st concession, thence north-westerly through the said concession to the boundary of the township, and along the boundary west to lot 18, ten miles.

The road has been improved throughout. Some deviations have been made from the old line.

Expenditure, \$477.71.

18. FRONTENAC ROAD.

The repairs on this road were commenced at the Village of Parham, a Post Office on the line thirty miles south of the Mississippi River. From Parham, for three miles, substantial and continuous repairs have been made.

On the north end, from Mississippi River for one mile southward, a piece of new road has been made ; a deviation from the old line to avoid several rocky hills. Between the end of this distance and the three miles repaired on the southerly end, slight repairs have been made throughout the whole distance.

Expenditure, \$800.57.

19. GLAMORGAN BOUNDARY ROAD.

Repairs were made on a part of this boundary commencing at Monck Road and proceeding northward.

The main improvement is a long crossway over a wet tamarac and cedar swamp. This swamp is one hundred and thirty-five rods across, and is distant from the Monk Road forty rods.

About one half of the crossway is covered with clay. Whole distance repaired something over half-a-mile.

Expenditure, \$202.27.

20. HASTINGS ROAD.

The overseer of this road work commenced at the distance of two miles south of Umfraville. These two miles were well repaired.

Then from Umfraville a deviation was made from the old line to avoid some very heavy hills.

This deviation was three miles long, and is an entirely new road.

Total distance improved, five miles.

Expenditure, \$1,000.

21. HORTON AND ROSS ROAD.

The improvements on this road were commenced one mile south of the town line between the townships of Horton and Ross, and extend north-westerly two miles. The line is described as being exceedingly rough, broken by frequent ravines.

Pier log bridges were built across two of these. The work is reported as being well done.

Expenditure \$750.

22. HAGARTY ROAD.

There are but two-and-a-half miles miles of this road repaired, on the town line between Brudenel and Hagarty.

The work is reported as being well performed, and of an expensive character.

Expenditure \$803.89.

23. HAGARTY AND BRUDENEL.

Seven-and-a-quarter miles of the above so-called road, which is really a section of the Opeongo road, have been repaired.

The work was commenced one-half mile west of the Peterson Road Junction in the township of Brudenel, and was extended eastward over the above distance.

The improvements are reported as being very well performed.

Expenditure \$845.14.

24. JUNCTION ROAD.

This is a line opened between the Frontenac Road in the township of Clarendon, eastward to a station on the Kingston and Pembroke Railway.

Seven miles have been opened and improved.

Expenditure \$425.22, on account.

25. L'AMABLE BRIDGE.

This bridge is on the Hastings Road, near the Jerman Mills.

The old bridge, built some twenty years ago was rotted completely away. A good substantial structure has been made. It is 109 feet long, supported by framed bents 12 feet high, covered with 4-inch pine plank, with good hand-rail on either side.

Expenditure \$244.57.

26. McNABB ROADS.

The work under this head consists of some repairs done to a number of short settlers' roads, in the above township, to the extent of three miles and three-quarters in all.

Expenditure \$489.68.

27. MONCK ROAD, NO. 1.

Six miles of this road have been very well repaired this season, commencing at the Victoria Road, and extending westward to the close of the work of last season.

Expenditure \$1,120.65.

28. MONCK, NO. 2, ROAD.

These repairs have been made from the 16th lot of Cardiff westward, over a distance of seven miles, extending to within about half a mile of the Burnt River.

Expenditure, \$320.05.

29. MINDEN ROAD.

This work consists of the opening of six-and-a-half miles of the above road from its intersection with the Peterson Road to Gull river crossing between Green and Maple lakes.

The road has been well made.

Expenditure, \$947.45.

30. MISSISSIPPI ROAD.

Certain improvements have been made on this road, over a distance of twenty-eight miles. The work was commenced at the intersection of the Addington Road and carried eastward.

The first five miles of this distance were thoroughly repaired, seven miles were repaired in the worst places, and over the last sixteen miles the broken crossways only were mended.

Expenditure, \$816.56.

31. MASSANOGA BRIDGE.

This is a long log pier bridge on the Addington Road where it crosses the Narrows of Massanoga lake in the township of Abinger.

It has been entirely renewed under a contract this season.

The bridge is 315 feet long. It is guarded by a strong hand-rail on either side and covered with flattened timber.

Expenditure, \$550.

32. METHUEN ROAD.

The entire length of this road has been partially repaired, from its commencement on the Chandos road to its termination southward at Sand lake.

Expenditure, \$303.26 on account.

33. PERTH ROAD.

Two and-a-half miles of this road have been substantially repaired commencing at Loboro' lake extending northward.

Expenditure, \$539.18.

34. PERRAULT SETTLEMENT ROAD.

These repairs were commenced at the intersection of the above road with the Opeongo road and were carried northward over three and-a-half miles.

Expenditure, \$839.50.

35. PETEWAWA BRIDGE.

This is a contract work.

The Petewawa Bridge is a very important structure. It is a combined Howe truss and queen post bridge, built eighteen years ago.

The main span of this bridge is 120 feet.

Some of the chord timbers are decayed. To secure the bridge for three or four years longer, a solid cut-water pier has been built under the chords at the centre of the span.

The work is reported to be well done and effective for the preservation of the bridge for a few years.

A part of the roadway of the bridge was also repaired with new planking.
Expenditure, \$250.

36. PETERSON ROAD.

This work was commenced at the distance of five miles west of the Hastings road.

From this point a new road has been opened. The old road ran over a succession of abrupt and high hills. The new road deviates to the southward and is a superior road.

It reaches to within two miles of the lands of the Canada Land and Immigration Company.

Expenditure, \$1,000.

37. PEMBROKE AND MATTAWAN ROAD.

These repairs were begun three miles west of the village of Pembroke, and were carried over a distance of three miles.

They are reported as being substantially and well made.
Expenditure, \$1,267.60.

38. SYDENHAM AND FERMOY ROAD.

This work was begun in the township of Loboro' about three miles north of the village of Sydenham.

The improvements were continued northward to the village of Fermoy, a distance of seven miles.

They are reported as well and substantially done.
Expenditure, \$527.23.

39. SHAMROCK ROAD.

This is really a part of the Opeongo Road. The section repaired under the above head is locally known as the Shamrock Road.

The repairs were commenced at the village of Shamrock and extended eastward to Renfrew village, a distance of eleven miles.

Expenditure, \$750.89.

40. STANHOPE ROAD.

This short road is considered as a branch of the Bobcaygeon, in the township of Stanhope. It commences to the north of the Peterson Road and terminates on lot 10, in the 4th concession of the above township, a distance of 3 miles.

Expenditure included in Bobcaygeon Road No. 1.

41. TAMWORTH ROAD.

The work on this road was commenced at the distance of two miles north of the village of Arden. The improvements embrace a distance of two miles. It appears from the Inspector's Report that this work is a deviation from the old line to avoid hills. The road is consequently a new one in this part. It is reported as being well done.

Expenditure, \$804.26.

42. VICTORIA ROAD.

The repairs on this line were commenced about two miles south of the Monck line intersection, and were extended northward a distance of four miles. The work has been very well performed. It has consisted mainly of grading, ditching, and crossway covering.

Expenditure, \$507.

43. VICTORIA BRIDGE.

This bridge is built across the Black River, on the Victoria Road, a short distance south of the townline of Dalton. It is 156 feet long, and 16 feet wide. The main span is 60 feet long, supported by a well-framed king post truss, with diagonal and lateral braces. The chords are bolted and the truss frame bolted and plated throughout. The flooring is of flattened timber, and the approaches are covered with flattened cedar. A strong hand rail extends throughout, on either side. The piers rest on solid rock foundations.

Expenditure, \$679.

44. YORK RIVER BRIDGE.

This is a new bridge built across the York Branch of the Madawaska River, on the Hastings Road, to supply the place of the old one, constructed about eighteen years ago.

The bridge is 136 feet long. The span is sixty feet clear. The two abutment piers are 16 and 13 feet high, respectively, built of square white pine tied in each round. They are filled with stone. The approaches are respectively 50 and 26 feet, covered with flattened cedar.

Expenditure, \$783.12.

SUMMARY OF EXPENDITURE ON COLONIZATION ROADS IN 1879.

I.

NORTH DIVISION.

1. Base Line Road	\$1,038 35
2. " " Branch Road	500 00
3. Batchawaung "	2,078 64
4. Bruce Mines "	280 00
5. Bridge in Lefroy "	150 00
6. Campment d' Ours "	520 35
7. Gore Bay "	963 77
8. Great Northern "	669 47
9. Hilton "	501 32
10. Honora Bay "	700 00
11. Killarney "	493 85
12. Kaministiquia "	995 71
13. Little Current "	864 92
14. Manitowaning "	523 10
15. Mudge Bay "	780 27
16. Milford Haven "	250 00
17. Oliver "	2,977 31
18. Otter Tail Lake "	750 00
19. Port Lock "	1,260 24
20. Pigeon River "	981 70
21. Providence Bay "	969 40
22. Rock Lake "	450 00
23. Rose and Lefroy "	353 10
24. Rose and Lefroy Bridge	250 00
25. Sanfield Bay Road	542 10
26. Tenby Bay "	696 39
27. Thessalon "	1,056 18
	\$22,596 17

II.

WEST DIVISION.

1. Ahmik Road	\$250 00
2. Armour "	1,001 87
<i>Carried forward</i>	\$1,251 87

<i>Brought forward</i>		\$1,251 87
3. Burk's Falls Bridge		648 59
4. Bethune "		800 00
5. Brunel Road		349 12
6. Christie "		1,036 18
7. Cardwell "		945 87
8. Cedar Narrows Bridge		1,052 25
9. Dalton and Washago Road		982 97
10. Eagle Lake "		1,081 09
11. " " Bridge		800 00
12. Fourth Con. Brunel Road		500 00
13. Gurd "		1,021 92
14. Gravenhurst and Baysville Road		1,012 73
15. Indian Peninsula "		800 81
16. Junction No. 1 "		580 24
17. Kearney Branch Road		999 62
18. Katrine Bridge		876 40
19. Muskoka No. 1 Road		3,541 53
20. " " 2 "		1,226 69
21. " " 3 "		1,266 46
22. Monteith and Perry No. 1 Road		528 60
23. " " " 2 "		497 20
24. Musquosh "		806 20
25. Macaulay "		990 03
26. Mills "		2,012 87
27. Maganetawan "		254 54
28. Nipissing Extension "		501 01
29. Northern No 1 "		3,191 78
30. " " 2 "		550 00
31. Northwest "		937 33
32. Orange Valley "		974 63
33. Otter Lake "		421 00
34. Port Vernon "		695 54
35. Port Sydney and Muskoka "		224 98
36. Parry Sound "		1,997 02
37. Poverty Bay "		1,007 47
38. Peninsula "		507 00
39. Port Sydney and Baysville "		189 47
40. Roesseau and Nipissing "		4,179 03
41. Stephenson "		1,029 56
42. Scotia "		500 00
43. South River Bridge		1,145 00
44. Stisted Road		497 88
45. Stephenson Bridge		335 00
46. Seguin River "		250 00
47. Town Line Chaffey Road		256 28

III \$47,253 76

EAST DIVISION

1. Addington No. 1 Road		\$1,921 88
2. " " 2 " "		825 56
3. " " 3 " "		447 57
4. Admaston "		997 45
5. Algona and Hagarty "		481 71

Carried forward \$3,774 17

	<i>Brought forward</i>	.....	\$3,774 17
6.	Bobcaygeon No 1	Road	2,051 79
7.	" " 2	"	250 00
8.	Buckhorn	"	250 00
9.	Barrie	"	450 91
10.	Bagot	"	815 93
11.	Burleigh	"	800 00
12.	Chandos	"	400 00
13.	Cameron	"	999 49
14.	Cobden	"	1,000 64
15.	Carden	"	300 00
16.	Denbigh	"	1,046 04
17.	Deer Lake	"	477 71
18.	Frontenac	"	800 57
19.	Glamorgan and Monmouth Road	.....	202 27
20.	Hastings	"	1,000 00
21.	Horton and Ross	"	750 00
22.	Hagarty	"	803 89
23.	Hagarty and Brudenel	"	845 14
24.	Junction	"	425 22
25.	McNabb	"	489 68
26.	Monck No. 1	"	1,120 65
27.	Monck No. 2	"	320 05
28.	Minden	"	947 45
29.	Mississippi	"	816 56
30.	Massanoga Bridge	.....	550 00
31.	Methuen Road	.....	300 00
32.	Perrault's Settlement Road	.....	839 50
33.	Peterson	"	1,000 00
34.	Petewawa Bridge	.....	250 00
35.	Pembroke and Mattawan Road	.....	1,267 60
36.	Perth	"	539 18
37.	Sydenham and Fermoy	"	527 23
38.	Shamrock	"	750 89
39.	Tamworth	"	804 26
40.	Victoria	"	507 00
41.	Victoria Bridge	.....	679 00
42.	York River "	.....	783 12
43.	L'Amable "	.....	244 57
			\$32,165 27

RECAPITULATION.

1.	North Division	.....	\$22,596 17
2.	West "	.....	47,253 76
3.	East "	.....	32,165 27
4.	Inspection and Locations	.....	3,639 68
5.	Balances of 1878	.....	6,248 94
			\$111,903 82

No. of miles of new road made	.....	240
No. " " " old roads repaired	.....	379 $\frac{1}{2}$
No. " large bridges built	.....	16
No. " " " repaired	.....	2

J. W. BRIDGLAND,
Supt. of Col. Roads.

SURVEYORS' REPORTS.

Appendix No. 22

DISTRICT OF PARRY SOUND.

TOWNSHIP OF MOWAT.

SARNIA, ONTARIO,
November 12th, 1879.

SIR,—I have the honour to report that in accordance with your instructions, dated 17th June, 1879, I have completed the survey of the township of Mowat. About the 17th June, I proceeded by way of Collingwood and Georgian Bay, to the mouth of French River, thence by tug steamer to the east boundary of Mowat, where I commenced work. Having surveyed this line myself last year, I made it the base of the survey, and ran the easterly concessions and side lines, carrying the work northward to French River. I then carried up the western part, winding up the survey at the north-west corner of the township on French river.

All that portion of the township lying south of concession line 10 and 11, and north between side line 30 and 31 and the west boundary to French River may be described as burst country, and rather below the average, although some fine tracts occur in the vicinity of the Key and Portage Lake. The timber is principally scrub pine and poplar, white birch, balsam, etc. The balance of the township to the north of concession line 10 and 11 and east of side line 30 and 31, will compare favourably with any land in the Parry Sound District. The soil being principally clay, with occasional patches of sandy loam, fully two thirds of this portion being well suited for agricultural purposes.

The timber being black birch, pine, hemlock, balsam, maple, etc. The only pine of any consequence in the township is to be found along both sides of the Pickerel river, extending about a mile inland.

There are but few lakes in this township and none of any importance.

On the whole I think it will, before long, be one of the most important townships in the District. The good land forming one unbroken chain with that of Blair and McConkey, and affording room for a large and prosperous settlement.

The terminus of the G. B. Branch, Canada Pacific Railway, will be somewhere in the vicinity of side line 5 and 6, Concession 17, South of the Pickerel river.

The only clearing found was about six acres on Kidd's location.

I would recommend that sufficient land to the west of Kidd's location, be reserved for a town plot.

I have the honour to be, Sir,
Your obedient servant,

THOS. BYRNE,
Provincial Land Surveyor.

The Honourable T. B. PARDEE,
Commissioner of Crown Lands,
Toronto.

Appendix No. 23.

TOWNSHIP OF WALLBRIDGE.

PARRY SOUND, ONTARIO,
December 3rd, 1879.

SIR,—I have the honour to report that under instructions from your office dated June 11th, 1879, to subdivide the township of Wallbridge into farm lots, I proceeded to said township about the middle of June, and after locating my supplies at different points along the Maganetawan River, I commenced said subdivision by chaining and posting the south boundary from the south-east angle westward to side line ten and eleven, where I observed Polaris on the night of the 26th, on eastern elongation, and ran said side line on a course N. $20^{\circ} 51' 40''$ W. Ast., and continued my work, carrying the belt between the east boundary and the Indian Reserve northward to the north boundary, which I found had been run by P. L. S. Byrne; thence westward, using the north boundary as my base, and carrying along all that part lying between the Maganetawan River, (which is the north boundary of the Indian Reserve) and the north boundary of the township as far as side line thirty-five and thirty-six, which was as far as Mr. Byrne had carried the north boundary. Here I observed Polaris on the night of August 18th, and continued said north boundary westward to the Georgian Bay, thence working southward, and finishing my survey the last of September.

The township of Wallbridge contains but a small percentage of good land, there only being about ten thousand acres in the South-east corner, and a few hundred, but in small pieces, along the Naiscootyong River that are fit for settlement, or where a settlement could be formed. This part of the township is well timbered with hard-wood and pine of a good quality, the soil being generally a good sandy loam, but in places clay. The remainder of the township has all been burned over and the timber destroyed, but has since grown up with small brush. There is a clearing of about thirty acres of good land on lots fifteen and sixteen, in the fifth concession, another on lots thirty-three and thirty-four, in the fourteenth concession, containing fifteen acres, and another containing ten acres on lots forty-six and forty-seven, in the fourteenth concession, at the outlet of Still River. These clearings have all been made by persons in the employ of the Maganetawan Lumber Company, and are occupied by said Company. The greater part of the township is drained by the Maganetawan River, which enters the township on the east side, in the fourth concession, and empties into Byng Inlet, opposite the most easterly of the Maganetawan Lumber Company's Reserves. Byng Inlet opens up from the Georgian Bay at the north-west corner of the township. The Maganetawan Lumber Company has two large saw-mills situated on the Inlet and employ about two hundred men.

I have the honour to be, Sir,
Your obedient servant,

DAVID BEATTY,
Provincial Land Surveyor.

The Honourable T. B. PARDEE,

Commissioner of Crown Lands,
Toronto.

Appendix No. 24.

DISTRICT OF NIPISSING.

TOWNSHIP OF BUTT.

DUBLIN, ONTARIO,
December 9th, 1879.

SIR,—In accordance with instructions received from you dated the twelfth day of June, 1879, to proceed to and survey the township of Butt, in the district of Nipissing,

into farm lots of one hundred acres each, I commenced the survey on the tenth day of July, by measuring from the south-west angle of the township, northerly along the boundary between the townships of Proudfoot and Butt, the depth of the first and second concessions. I then ran the line in the centre of the road allowance between the second and third concessions on the required course of north $69^{\circ} 8' 20''$ east, to the centre of the road allowance between lots numbers five and six, making the lots twenty chains in width and the road allowances one chain in width. I then ran the line in the centre of the road allowance between lots numbers five and six the depth of the second and first concessions to the boundary between the townships of McCraney and Butt. I then ran the line in the centre of the road allowance between the townships of McCraney and Butt westerly from the line between lots numbers five and six to the boundary between the townships of Butt and Proudfoot, I ran the boundary between the townships of McCraney and Butt, westerly from the side line between lots numbers five and six, because the ground was so rough and broken at the south-west angle of the township, as to make it very difficult to run a correct line from that point. I ran the boundary between the townships of McCraney and Butt, easterly from the side line between lots numbers five and six, and the line between the second and third and the line between the fourth and fifth concessions easterly to the east boundary. I also ran the side road lines between each fifth and sixth lot and the east boundary across those four concessions. I then ran the east boundary across the fifth and sixth and seventh and eighth concessions. I then ran the line between the sixth and seventh concessions and the line between the eighth and ninth concessions, westerly to the west boundary. I also ran the different side road lines across those four concessions. I then ran the line between the tenth and eleventh concessions, and the line between the twelfth and thirteenth concessions, easterly to the east boundary. I also ran the side road lines and the east boundary northerly from the line between the eighth and ninth concessions to the north boundary. I also chained the north boundary and planted the posts for the lots fronting on it.

I ran all the lines in the centre of the road allowances. I planted posts of the required dimensions and of the best timber which I could conveniently obtain at the corners of the lots at the distance of fifty links on each side of the line in the centre of the concession road allowances, with the numbers of the lots and concessions marked on them. I also planted posts on the line of survey with the numbers of the lots marked on their east and west sides, as guides to the lot posts.

In carrying out this survey I have conformed closely with the Instructions.

The township of Butt is very much broken with hills and rocky ridges. The soil is sand and sandy loam. There are a great many small lakes in the township. The timber is principally birch, maple, balsam, beech, pine, cedar and tamarac. The pine is a good deal scattered, there not being a sufficient quantity of it together to make it valuable for lumbering purposes.

There is a mill site with a fall of about twenty feet on the south branch of the Maganetawan River, on lot number five on the ninth concession.

The best land is in the second, third, fourth and fifth concessions. There is a good deal of swamp along the east boundary, and in the north-east portion of the township.

The land in general in this township, owing to its hilly surface and light soil is not as well adapted for the growth of grain, but is better suited for grazing and stock-raising than the land in the adjoining townships on the south and west.

I met with no stratified rocks during the survey. The fixed rock is granite and it is covered in a great many places with only a few inches of soil.

The water runs west in the west portion, south in the south-east portion and east in the north-east portion of the township.

All of which is respectfully submitted.

I have the honour to be, Sir,
Your obedient servant,

J. J. MCKENNA,
Provincial Land Surveyor.

The Honourable T. B. PARDEE,
Commissioner of Crown Lands,
Toronto.

Appendix No. 25.

TOWNSHIP OF PAXTON.

MOUNT FOREST, ONTARIO,
November, 1879.

SIR,—I have the honour to submit to you my final report on the survey of the township of Paxton, surveyed under instructions from your department, dated the 12th day of June, 1879.

This township is situated in the district of Nipissing, and is bounded as follows: on the south by the new township of Butt; on the west by the township of Joly, in the district of Parry Sound; on the north by the new township of Ballantyne; and on the east by the unsurveyed lands of the Crown.

As instructed, I commenced the survey at the south-west angle of the township, and after an observation of Polaris, I ran the south boundary north $69^{\circ} 08' 20''$ east a distance of three hundred chains laying off the different lots, with their respective widths of twenty chains each, numbering them from west towards the east, also allowing for the road allowance one chain in width between every fifth and sixth lot. From this point I also retraced the easterly boundary of Joly and at the proper distance laying off the concession line between concessions two and three, parallel with the south boundary, also on these lines giving each lot its proper width, and allowing for the road allowance. I also checked with the side lines running from the south boundary between lots 5 and 6, and lots 10 and 11, at right angles to the boundary. I continued the work in this manner until I reached the north boundary. I then returned towards my south boundary, running the lines between lots 20 and 21 and extending the different concession lines to the side line between lots 25 and 26. Upon reaching my south boundary, I extended it to the east boundary, laying off the lots and side lines as before. On reaching the line between lots 30 and 31, I moved northerly on this line, at the same time running the line between lots 25 and 26, extending the different concession lines to, and running the east boundary as well as the line between lots 30 and 31, and finishing the township at the north-east angle.

I also surveyed the different lakes as I met with them during the progress of the survey. This township might almost be said to be situated directly on the height of land, with the north branch of the River Maganetawan having its head waters in the different lakes at the south-west part of the township, and running through the township of Joly, on the east and thence to Georgian Bay. The south river with two branches, one rising almost at the south-east angle of the township and joining the other branch which runs along the north part draining the north-east angle and north part, and empties into Lake Nipissing, and the Petawawa River, rising in the lakes on lots 16, 17 and 18, in concessions 3 and 4, thence almost directly along the side road between lots 15 and 16 to concession 1, where it is joined by the outlet of the lake on lots 12, 13, 14 and 15, and continues along this concession leaving it on lot 22.

Owing to the cause mentioned above, the country is considerably broken by swamps and rocky ridges. A considerable amount of land fit for agricultural purposes is found between these swamps and ridges, probably from thirty to forty per cent. of the whole township. The soil is good, being of a light sandy loam.

Regarding the land fit for agricultural purposes, the township may be divided into three sections almost similar to the divisions on the timber plan: 1st. A section including the first block in concession 1 and 2; then north-easterly to the small lake at the north-east angle of lot 15, concession 4; then following the concession line between this concession and concession 5, until the west branch of the South River is met with; then along the river to the west boundary of the township, and including that part between this boundary and the river. This section will contain about fifty per cent. of good land, timbered with beech, maple, balsam, black birch, and an occasional white pine; the timber is cedar and spruce in the swamps; there is also a thick growth of maple under-

brush on the high lands. This block will contain about 20,000 acres. 2nd. A section including all that part of concessions 1, 2, 3, and 4, not mentioned in section 1. Also all between the two south-westerly branches of the South River; of this section, I might say about twenty-five per cent., will be good land, timbered with maple, birch, spruce and a considerable amount of pine, generally small: in the swamps, spruce, balsam, with alder brush. 3rd. A section including the remainder of the township. In this section the timber is chiefly pine, mixed with birch and balsam, and a smaller amount of maple than in the other sections. A considerable amount of the pine has been blown down. Not above ten per cent. of this section can be said to be fit for settlement.

Owing to the country being so much broken by rocky ridges, it will be impossible to make roads on the proper road allowances.

The best means of getting into the township at present is from Kearney, then by canoes up the South Maganetawan River, and across Sand Lake to the side line between lots 15 and 16, in the township of Proudfoot, then along this line to Grass Lake, about three miles. With very little labour a very good waggon road can be made along this line between these two lakes, from Grass Lake to within 3 miles of the south-west angle of the township and also the east end of Long Lake.

Owing to the small lakes and short portages there is comparatively little trouble over the remaining 3 miles to the south-east angle. I cut a very good trail when going into the survey.

This route would do very well for a settler beginning, and I am told a very good road can be got from the north side of Sand Lake through the township of Proudfoot along the south side of Long Lake to this township, but I never passed through the country myself.

I have the honour to be, Sir,

Your obedient servant,

JAMES K. McLEAN,
Provincial Land Surveyor.

To the Honourable T. B. PARDEE,

Commissioner of Crown Lands,
Toronto.

Appendix No. 26.

TOWNSHIP OF McCRANEY.

PREScott, ONTARIO, November 13th, 1879.

SIR,—I have to report that in accordance with your instructions to me, dated Toronto, June 12th, 1879, appointing me to survey the township of McCraney into farm lots. I commenced work thereon the last week in June, completing the field work the latter part of September.

Finding on the ground that the south boundary of Bethune did not coincide with the north boundary of Finlayson, I commenced the survey by producing the eastern boundary of Bethune from its south-easterly corner to its intersection with the north boundary of Finlayson, there establishing the south-west corner of McCraney; from there chaining easterly along the aforesaid north boundary, I determined No. 5 and 6 side line; from thence, running northerly, I laid off the various concessions and side-road lines, as shewn on the accompanying plan and field notes.

The township of McCraney contains within its area the head waters of the two main branches of the East River, the westerly branch taking its rise from the north-eastern portion of the township in Rainy and Island Lakes, while the easterly one in reality commences at Moose Lake. The country along both branches, and in their immediate vicinity, is mostly a high hard-wood region, while in the north-east corner, and along the lakes the surface of the land is not so broken.

Moose, Rainy and Island are the principal lakes, and the water in all three is clear and generally deep. Moose Lake has, in some places, hard, sandy shores, while the others are rocky; fish abound, salmon trout of a large size being readily taken. Many of the smaller lakes and ponds are formed by beavers of which there are evidently a number. Dams (some of a large size and recent construction) are on nearly every stream and hold back a large amount of water in many places.

The two branches of East River are the principal streams. The westerly and longest branch is much broken by rapids, and is generally shallow, the bottom in most places being a coarse gravel. The east branch may be said to lose itself in Moose Lake, as only small streams enter the lake from the different valleys, &c. I noticed two mill sites on the west branch, one on Lot 6, concession 2, and another on Lot 5, concession 4.

The principal ranges of hills occur along the two branches, and in many places attain considerable elevation. The whole township is, however, generally speaking, hilly and broken.

The township is generally a hard-wood one, the only pine occurring in and about the various lakes, and this neither large nor of superior quality. Birch and maple predominate, and some fine tracts of these exist.

The soil is mostly a sandy loam, and the surface generally stony, but many fair tracts of arable land can be obtained.

The township is, I think, well adapted for stock-raising, and I have no doubt hay and the coarse cereals can be profitably raised.

I should recommend a road to be made to enter the township from Bethune on the 10th and 11th concession, thence following a concession line bearing through the township. This would, I consider, render the best land at once available for settlement. I cannot refrain from expressing my surprise at the manner in which this section of the country has settled up since 1874, in most part due to the wise and judicious selection and construction of the different colonization roads traversing it. Large clearings and comfortable homes now exist where I remember the native forest, and as fine fall wheat was cut in the township of Perry this year as I have often seen in Western Ontario; this may be due in part to a favourable season, but I think the soil is, in many cases, more suitable to its growth than has hitherto been supposed.

I consider about two-thirds of the township fit for settlement.

I have the honour to be, Sir,

Your obedient servant,

CHAS. F. CHAPMAN,

Provincial Land Surveyor.

The Honourable T. B. PARDEE,

Commissioner of Crown Lands.

Toronto.

Appendix No. 27.

TOWNSHIP OF BALLANTYNE.

FENELON FALLS, ONTARIO,
December 8th, 1879

SIR,—I have the honour to inform you that I have completed the survey of the township of Ballantyne, in the district of Nipissing, in accordance with instructions from the Department of Crown Lands, dated 14th June, A.D. 1879. Said survey being commenced on the 21st of July, 1879, and completed on the 1st of November following, and beg leave to submit the following report, together with the field-notes and plan thereof.

I commenced the survey at the south-west angle of the township and ran the south boundary on an astronomical course N. 69° 8' 20" E. to near the east side of lot number 16, making each lot twenty chains wide, leaving fifty links for a road east of the

line run in the centre of the road allowance on the east side of the township of Laurier, and one chain for road between lots 5 and 6, 10 and 11, and 15 and 16. I then went first into the interior of the township on the line between lots 10 and 11, filling in as I went all between the west boundary and lots 15 and 16 and running the latter line. I carried the same range of lots to the north boundary before going further east into the township and connected my line between lots 5 and 6 with the south boundary of the Township of Himsworth making each concession up to 13, fifty chains and leaving one chain for road between concessions 2 and 3, 4 and 5, 6 and 7, 8 and 9, 10 and 11, and 12 and 13. I found concessions 13 and 14 to contain $118\frac{6}{100}$ chains, which I divided in the centre, making each of them $59\frac{3}{100}$ chains. I then ran the north boundary, the line between concessions 12 and 13, and also between 10 and 11, to the east boundary, filling in as I went, the side lines. I then produced the lines between lots 20 and 21, 25 and 26, 30 and 31 and the east boundary south, as far as Kah-wah-was-kig-omog Lake and filling in the concession lines, and then took up the south boundary at the point I left it on lot 16, and produced it to the east boundary filling in what was left, between it and the lake.

The soil is principally sandy loam with clay, or clay subsoil in the flats, and mostly rolling, there being few level spots of any great extent, some pretty high hills, but no regular chain of mountains, in any given direction. I did not find much land in any one place entirely free from stones, or much of what might be called first-class land, but there is a large quantity of what might be called fair land, on which industrious settlers can make a good living. Most of the land on the south boundary, east of lot 25, is fair, some very good. Concessions 2 and 3, from lot 5 to lot 10, and 15 to 20, fair; concessions 4 and 5 from lot 1 to lot 6, and also from Wah-was-kig-omog Lake to east boundary, good; concessions 6 and 7, from lot 5 to 10, from lot 15 to 25, and also from 30 to 34, very fair; concessions 8 and 9, all good land; concessions 12 and 13, from lot 5 to 20, good, and the north boundary, very fair land, except from 6 to 20 and 30 to 24.

I should say, upon the whole, there is forty per cent. of the township adapted for settlement, while most of the balance will make good pasture lands. None of the swamps are of very great extent, nor are any of them very wet.

The timber is mostly burnt along the south boundary as far east as lot 15, but it only extends a few chains into the township, and there are clumps of green wood, mostly pine, all along it. Of the hardwood timber, the prevailing is, black birch, not very large, next maple, then beech, with a few basswood and black ash, there is also a good deal of hemlock, but not much cedar, with a dense growth of underbrush, all over the township, composed of balsam, hazel, ground hemlock, alder and mountain ash, with small tamarac in most of the swamps.

The township contains also a large quantity of very superior white pine, both large clean and sound. The south-west corner contains the most and also the largest variety, with fine groves round most of the lakes, and scattering large trees nearly all through the hardwood, but I fear that should a fire break out in the township before it is cut, a large part of it will be destroyed, as the ground is literally covered, especially in the pineries, with lying, half rotten, timber.

As I found no trace of wind-falls or former fires, except as above stated, on the west part of the south boundary, I am at a loss to account for so much lying timber, it seems simply to have decayed and fallen down.

The rocks are composed altogether of gneiss and granite; the prevailing rock is gneiss. Heretofore I have invariably found gneiss dipping to the north-east, but in Ballantyne the dip is invariably to the south-east. I found no trace of limestone, or any kind of mineral and not more than about 4 degrees of local attraction.

The township is well watered by lakes of clear spring water, and fine creeks. Most of the smaller lakes contain large speckled trout, while the larger contain both speckled and salmon trout, and in Wah-was-kig-o-mog Lake are also large white fish, besides those above mentioned. Lake Wah-was-kig-omog is evidently the source of the Amable Du Fond River. The river between it and Wah-was-kig-o-mog, is a fine stream, averaging nearly sixty links in width, and at low water, when I saw it, about two feet deep, with a slow current, down to the line between the lots 20 and 21, from which, to the lake, it is a series of falls and rapids, with a fall altogether, of not less than thirty feet, with rocky

bottom and banks, making an excellent mill site. Wah-was-kig-omog Lake expands into what is evidently a larger lake, immediately east of Ballantyne, emptying towards the north-east into Manitou lake, by a river only a few chains long. The lakes are all very deep in proportion to their size, except Wah-was-kig-omog, which is shallow with a sandy bottom. Crystal Lake is so clear that the bottom can be distinctly seen at a depth of twenty feet, it has neither an inlet nor outlet, but I think it must empty by some underground channel into the pond on lot 9, concessions 6 and 7; neither has the small lake in lots 4 and 5, concessions 6 and 7, any visible outlet, but it is ten feet higher than the one immediately east of it.

All the lakes in the north-east quarter of the township, I was informed by Indians, empty into Manitou lake. There is another good mill site at the outlet of Kah-kas-ah-mick Lake, with a fall of about ten feet. I traversed all the lakes with a micrometer.

I apprehend that the north part will be most readily settled from the township of Himsworth, and the south, through Joly, while the Amable Du Fond River affords an easy means of access from the east.

There being no settlers or improvements in the township, no inspection returns are required.

I have the honour to be, Sir,
Your obedient servant,
JAMES DICKSON,
Provincial Land Surveyor.

The Honourable T. B. PARDEE,
Commissioner of Crown Lands,
Toronto.

Appendix No. 28.

TOWNSHIP OF FINLAYSON.

FENELON FALLS, ONTARIO.
March 25th, 1879.

SIR.—I have the honour to inform you that I have completed the survey of the township of Finlayson, in the District of Nipissing, made under instructions from the Department of Crown Lands, dated 2nd May, 1878, said survey having been commenced on the 29th July, 1878, and completed on the 14th February, 1879, and I beg leave to submit the following report, together with the field notes and plan thereof:

I commenced the survey at the south-west angle of the township, and measured from thence easterly along the north boundary of the township of McClintock, a distance of 100 chains, planting, as I went, lot posts at every 20 chains, at a distance of 50 links north of the line, and also guide posts to the lots on the line itself.

At a distance of 50 links east of the south-east angle of lot 5, and also 50 links north of the centre of the boundary, I took an observation on the eastern elongation of Polaris, and commenced the line between lots 5 and 6 on a true astronomical course, N. $20^{\circ} 51' 40''$ W., and ran it a distance of 100 chains to the north end of the second concession, and laying off 50 links for half the allowance for road between concessions 2 and 3, ran from thence the line between said concessions on a true course, N. $69^{\circ} 8' 20''$ E., and at the intersection of this line with the line between lots 15 and 16, I took another observation in order to verify my work. The details of these observations, as well as others taken during the progress of the survey, will be found in their proper place in the returns enclosed. On these two lines, viz., the side line between lots 5 and 6, and the line between concessions 2 and 3, I based the whole of my work, running the concession lines both east and west from the line between lots 5 and 6, and the side lines north and south from the line between concessions 2 and 3. But for the sake of uniformity in the field notes returned to the Department, the side lines read straight through from the

south to the north boundary, and the concession lines from the west to the east boundary.

The distances across lakes where not shewn as having been ascertained by triangulation, were measured on the ice.

By referring to the field notes and plan, you will perceive that I intend concession 2 shall be the proper depth, viz., fifty chains, and the broken lots which have been occasioned by crooks in the south boundary, all in the 1st concession.

The soil is principally either sandy loam or sand, varied by clay in a few places, and nearly all less or more stony, and nearly all undulating, with some few high and steep hills and bluffs. I cannot say that there are any continuous chains of hills in any given direction, even along the rivers and around the lakes.

I did not find any great extent of good land in any one place, but along the west boundary, and as far west as lot 16, and as far north as the 10th concession inclusive the land is very fair. There are also a few very fair lots in the 14th concession near the west boundary, and tracts of good land nearly all along the north boundary, the best being near the north-east corner of the township. There is also in the south-east corner some very fair land, and along side lines 30 and 31, and also along side lines 35 and 36 north of the North River, and extending to the East River.

Upon the whole, I should say that fully one-third of the township is adapted for settlement, besides large tracts well adapted for pasture.

By reference to the plan, you will perceive that there are a considerable number of swamps, swales and marshes, but none of them are of any great extent, and although there are a good number of beaver in the township, I found no beaver meadows, and very few beaver ponds, the animals being mostly what are known as "bank beaver," located along the deep pools on the rivers, and instead of building houses, burrow in the banks, where the streams have little or no current, sinking their winter food in the water in front of their holes or burrows.

By reference to the "timber map" enclosed, you will see that the greater portion of the township is timbered with hardwood, and that the pine is mostly around the lakes and along the streams. It is also of the variety known as "white pine," except a very small quantity of small redpine, along the south half of the east side of Fatty's Lake. The largest and best quality I saw is in the seventh and eighth concessions, and between side lines 5 and 6 and 10 and 11 and extending a short distance into the 9th concession, besides what is shewn as pine timber on the "timber map," there is scattering pine nearly all through the hardwood. I cannot form any proper estimate of the quantity of good pine in the township, but I should say what I have seen will average about two clear and one knotty log of 13 feet long and sixteen inches in diameter, to the tree. Respecting the other timber, the larger portion is black birch, next maple, then hemlock and beech. I found no elm and very little basswood or ash. Cedar is also scarce, mostly of an inferior quality, and confined to a few places. There is a great quantity of balsam, and a dense undergrowth of hazel, etc., more especially around the water, which impedes the progress of the work very materially.

The rock is composed wholly of gneiss and granite, dipping as I have invariably found it, to the north-east. Strike, south-east by north-west. I met with no limestone, nor any appearance of any mineral whatever, not even iron, and very little local attraction of the magnetic needle. There is very little quartz or feldspar; the rocks are mostly gneiss. I collected a few geological specimens at the beginning of the survey, but as there was nothing whatever interesting in them, nor anything which could not be picked up at random on any granite hill, I threw them away.

By referring to the plan, you will perceive that, although there are a large number of lakes, none of them can be called large. I did not personally ascertain whether there are fish in any except Camp Lake, and Lake Tasso, but in these we found very fine salmon trout, and I learned from trappers that all the others, of any size, abound in trout of a very fine quality.

Of the rivers the "East River" is, although in many places a chain wide, a very small stream, and I think that the branch crossed by the north boundary is the main stream, as that branch which extends easterly through Finlayson, dwindles down in many places to a mere creek.

I find on referring to the projected plan of the township, which accompanied my instructions, that "Long Lake" is shewn to be on North River, but this as will be seen by my plan, is not the case. There is another lake, shewn on the same projected plan, on the river at the side line between lots 35 and 36; this is also incorrect; during its whole course in Finlayson there is nothing approaching to a lake on the river, but I am informed, that there are two large lakes on it, in the township east of Finlayson.

North River, although having a bed of about one chain wide on an average, is also in reality a small stream, except during the spring freshets and heavy rains, and will require expensive improvements before timber can be taken down it. On lot 14 there is a perpenicular fall of about twenty feet, and this is the only place where there is a mill site in its whole course through the township.

In my instructions, I am ordered to continue the north boundary of McClintock across lots 30, 31 and 32 of this township, until I reach its north-east angle and plant the necessary posts, at the corners of the above mentioned lots in the 14th concession of McClintock.

I only found the boundary run to the west side of the small lake, shewn on the plan on lots twenty-eight and twenty-nine in Finlayson. From this point I continued the line easterly on the same course till I came opposite the east boundary of McClintock, where I found I was $6 \frac{5}{100}$ chains north of the north-west corner of Finlayson. I then calculated on what course to run a line from this point so as to strike my first line at side line 30 and 31 Finlayson, as I thought it better to make the angle at where two road allowances intersected, than at any other point, and on running my new line, westerly I struck the required point. I then adopted this as the true boundary, blazed it, and planted the necessary lot posts on either side of it, from where it strikes the small lake above mentioned to the north-west corner of Livingstone. The true bearing of this line is shewn on my plan and field-notes.

I did not make out separate field-notes of that portion of the work belonging to McClintock, presuming that the notes furnished will be sufficient for both; it took me two days to do the extra work here; it is always more difficult to take up old work than to do new.

I had six men in the field with me, and a cook in camp. Their pay was \$18 each per month and board. I will be satisfied with whatever amount the department may choose to allow me for it.

There are no roads whatever in the township, but settlers are rapidly moving into the east side of the township of Sinclair, where there is one road already partly made, and this road will be the most convenient for intending settlers in Finlayson.

There being no squatters or improvements in the township, no inspection returns are required.

I have the honour to be, Sir,
Your obedient servant,
JAMES DICKSON.
Provincial Land Surveyor.

The Honourable T. B. PARDEE.
Commissioner of Crown Lands,
Toronto.

Appendix No. 29.

DISTRICT OF ALGOMA.

TOWNSHIP OF GLADSTONE.

MILL POINT, ONTARIO,
November 12th, 1879.

Sir,—In accordance with instructions received from you, dated 14th June, 1879, to proceed to, and survey the township of Gladstone, on the Mississauga River, north shore of

Lake Huron, into lots of 320 acres each, on the 16th July I left Mill Point for Collingwood, taking with me a chainman and one assistant. Upon my arrival I hired axemen and purchased supplies. From that point I proceeded by steamer to Blind River, where I procured a sail-boat and transported men, supplies, etc., to the mouth of the Mississauga River. Here I secured canoes and proceeded on my way up the river until I arrived at the western boundary of Thompson. I retraced this line northerly to the south-west angle of Patton, where I found an original post.

On the night of Wednesday, the 23rd of July, I took an observation of Polaris, at its eastern elongation, and turning off the azimuth, I measured an angle of 90 degrees and proceeded to run the south boundary of Gladstone. After running exactly 80 chains, I turned and ran a due north line between lots 2 and 3. Making this line my base of operations, I measured 80 chains north and turned off the concession line between 1 and 2 and carried the line both ways to the east and west boundaries, respectively, making lot 2, 40 chains and lot 1 whatever it happened to be. I then ran all my concession lines excepting between 3 and 4, and 5 and 6, which I only ran to the mining locations as directed and shewn on projected plan. I thus carried on my operations to the north and west, finishing up at the north-west angle. In posting the north side of mining location No. 3, I did not plant a post between lots 11 and 12, but called the whole lot 11, as it would have made lot 12 a very small one.

For a like reason I planted no posts between lots 11 and 12, on the north side of mining location No. 2. All distances across lakes and rivers on lines were obtained by either triangulation or offsets.

In traversing Mississauga River, where possible it was done by intersected bearings; other distances were arrived at by careful estimate.

All lakes were traversed by triangulation from a measured base, or bases, as the case required, excepting the small pond on the north boundary which I did not deem of sufficient importance.

As the township has been mostly cut over by lumbermen I found very little pine suitable for marketable purposes, but scattered throughout the township large trees are to be found. There is however, a considerable quantity of pitch and Norway pine suitable for railway ties, etc.

There is a considerable lot of hemlock scattered throughout the township, but never in clumps, being mixed up with the hardwood.

Maple and birch form a very fair proportion of the timber, the maple being chiefly of the "birdseye" variety, and possesses no inconsiderable marketable value, as a material for furniture, cabinet ware, etc. The black birch is also a valuable timber for furniture and cabinet makers' purposes. The trees are unusually large, sound and healthy, frequently measuring 40 inches or more across the butt. The balance of the timber is balsam, spruce, cedar and tamarac, chiefly found in the swamps. The cedar is of no marketable value, being too small and scrubby. Frequent thickets of balsam and tamarac are to be found throughout the township, making it very slow work to cut lines through them.

Alder and willow swales are also of frequent occurrence.

The soil is generally a red sandy loam and is well adapted for agricultural purposes. Where exposures occur, as along the river banks, it is found to be underlaid by a kind of heavy blue clay, and this again by a kind of decomposed clay-stone.

From a geological point of view the township of Gladstone possesses no little interest, as the Huronian and Laurentian formations find their dividing line here. One moment we come across the well known Huronian slates, to be followed the next by the Gneissoid rocks of the Laurentian. Owing to the frequency of water-sheds, numerous high cliffs and bluffs are to be found running parallel with the River Mississauga, and also between the different lakes, etc. Those to the east of the township are generally gneiss, and of Laurentian age, while those to the west are composed chiefly of slate, and are of Huronian date. Outside of the mining locations that have been already surveyed, I found no minerals of economic value. I obtained specimens from the different lodes in each location; they are herewith enclosed.

The township is abundantly and well watered, the Mississauga River traversing it from its south-east to its north-west angle. It is a fine river, varying in width from three to

ten chains. The banks are high, in places immense cliffs, at others an exposure of the soil takes place. Here and there along the south and west banks, good flats of arable land are to be found. The river in places is very deep, at others quite shallow, with numerous sandy shoals. It is very rapid over all the shallow points. Quite a number of falls are within the limits of this township, the first one on lot 8, concession 4, being a flat, rough rapid about 15 chains long, with three leaps of an estimated total fall of 10 feet. The Indians, however, run it with their canoes.

The second one, on lot 10, in the 4th concession, is a very picturesque abrupt fall of about 20 feet, an island in the centre of the fall dividing it into two chutes. This is the highest point fish ascend.

The third is known as the "Slate Falls Portage," situated in mining location No. 1, south. It is a very beautiful fall of about 20 feet, and glides smoothly over the natural "dip" of the slate strata, and is about six chains wide. The fourth and last, is situated on the west boundary, in the sixth concession. It is grandly picturesque. Here the whole river takes a sharp turn to the west, at an angle of about 60° , and first rolls over a cliff about 30 feet high into a natural canal, with perpendicular walls. This canal is only 30 feet wide, and the river rushes through it for about ten chains, white with foam, into the adjoining township of Day. It then turns sharply back again to the east, returning to the township of Gladstone. Sturgeon and pike were the only fish we succeeded in capturing.

To the east, entering the township at its north-east corner, and shortly leaving it again to return about half way down the boundary, is the Marsh River. As its name implies, it is a marshy stream, and of no importance, its width at no point exceeding one chain; it is not navigable; no fish were found in it.

Pakawagamengan, or Mud Lake, is the largest within the township. It is situated in the south-west corner. The water is of a somewhat muddy character, but still very good for drinking purposes. Wild rice grows on its shores. Ducks and fish are plentiful, I am told.

Wahquekobing, or Basswood Lake, is the next one of importance, only a bay of it entering this township, the larger part lying in the adjoining township of Day. The water of this lake is beautifully clear and cold, the bottom being plainly visible at a depth of twenty feet or more. Fish are very plentiful, bass, trout, and pickerel being the principal varieties.

Clear Lake, and also the small lake to the east of it, are both clear cold spring lakes, with high bold shores. Trout and bass were found in both. The other small lakes are of no importance, being mere ponds, the water being swampy and brackish.

A great many small springs are to be found all throughout the township.

A small settlement might be formed on the North shore of Lake Pakawagamengan. A man can paddle easily to the Hudson Bay Post at the mouth of the Mississauga River in one day by taking the creek which forms the out-let of this lake, and which passes through the adjoining township of Bright. Mr. Joseph Dupuis, who has a clearing on the boundary between Gladstone and Day, on the north half of 12, in the 2nd concession, informs me he is only 12 miles from a grist mill by way of Lake Wahquecobing and Thessalon River. Mr. Dupuis had as fine a crop of wheat as I have seen for a long time, testifying in the best manner, to the richness of the soil.

Mr. Henry Brisson has also a clearing of about five acres and had an excellent crop of wheat, beans, potatoes and corn. He is also on the north half of lot 12, in the 2nd concession.

Another settlement might be formed around Clear Lake, and also the small lake to the east of it. The eligible flats along the river and also along the north boundary will, in the course of time, be settled up. Taking this township altogether, I think there is fully 50 per cent. of it fit for settlement.

The presence of mining facilities will also be a valuable adjunct in its future settlement.

A mill site might be obtained at the Slate Falls with little expense.

I crossed one of the exploration lines of the Canada Pacific Railway. Should it ever be built, I have no doubt every available foot of land in this district would be taken up.

I have the honour to enclose my returns of survey, which I trust will be found satisfactory.

I have the honour to be, Sir,

Your obedient servant,

MATTHEW J. BUTLER,

Provincial Land Surveyor.

The Honourable T. B. PARDEE,
Commissioner of Crown Lands,
Toronto.

Appendix No. 30.

TOWNSHIP OF BRIGHT AND BRIGHT ADDITIONAL.

LISTOWEL, ONTARIO.

November 1st, 1879.

SIR,—I beg leave to submit the following report of the survey of the township of Bright and Bright additional, in the district of Algoma.

As per your instructions dated the fourteenth day of June, A. D. 1879, I retraced the west boundary of the township of Thompson, until I came to the post between sections nineteen and thirty which point I found to be twenty-four chains and seventy-one links northerly from the shore of Lake Huron. At this point, after ascertaining by astronomical observation the true course, I ran due west, astronomical, for the front of the third concession, planting a post at forty chains, being the point between lots 1 and 2; at eighty chains, I ran due north between lots 2 and 3, and continued north, laying off the fourth and fifth concessions at a depth of eighty chains each, leaving the 6th concession plus or minus as the case might be. On arriving at the north boundary, I found that P.L.S. M. J. Butler had already run the said boundary between Bright and Gladstone. I therefore produced the concession lines due east and west, running the side lines due north and south as per your instructions.

I traversed Lake Pakawagameng and another small lake, being all that I considered large enough.

I also traversed the River Mississauga from the point that it crosses the north boundary of his township to the point on the east boundary at which it flows out.

Also the shore of Lake Huron, commencing at the south-east corner of this township, and ending at the south-east corner of the Indian reserve, connecting the same with the concessions and side lines.

In Bright additional I found lines running north and south, and east and west, cut and blazed. On enquiry I ascertained that some parties had during last winter run these lines with a view of taking up the best lots and making improvements thereon. Commencing their survey from the Indian reserve, making the concessions and lots correspond therewith, it did not coincide with the proper survey, consequently on some lots more than one party had made improvements, thereby causing disputes.

The greater portion of the township is covered with cedar, pine, tamarac, spruce and balsam, mixed with birch, poplar and hemlock. The pine is very much scattered, but of good quality, the Dymont lumber company having taken out the greater part during last winter.

In the north-east portion of Bright there is a district which has been burnt over some ten or twelve years ago, leaving here and there a small patch of the original forest. The greater portion of this district is covered with balsam, tamarac, cedar, poplar and birch scrub with here and there a dry pine standing.

In Bright additional there are several hardwood ridges, very heavily timbered with maple, birch, and hemlock; in the valleys and flats considerable ash and elm.

Nearly all of Bright is of clay loam, but rather wet and cold, with the exception of a portion of the burnt district which is more rolling, and consequently drier and more porous.

In Bright additional the soil is not so good, in many places nothing but blowing sand, and in the swamps quick-sand bottom.

Water is of good quality, and abundant throughout the township. Quite a number of fine springs and small streams. In the lakes the water is clear and good, but soft.

Nearly all the rock in this township is argillaceous. In the north-east portion of Bright there are several ridges of this rock protruding in many places over fifty feet in height, but narrow. The soil between these ridges is of excellent quality.

Red granite crops out here and there along the shore of Lake Huron, but does not protrude more than ten feet; boulders of granite and pudding stone, containing jasper, are found along the shore and a short distance northerly.

I did not consider it necessary to collect any specimens of rock, there being nothing of any value to be found.

The greater portion of the township is level and fit for cultivation, having excellent facilities for transportation by water, and if settled with thrifty farmers would in a few years become a prosperous settlement.

All of which is respectfully submitted.

I have the honour to be, Sir,
Your obedient servant,
LEWIS BOLTON,
Provincial Land Surveyor.

To the Honourable T. B. PARDEE,
Commissioner of Crown Lands,
Toronto.

Appendix No. 31.

TOWNSHIP OF PARKINSON.

COLLINGWOOD, ONTARIO.
November 15th, 1879.

SIR,—I have the honour, in accordance with instructions dated June 17th, 1879, to submit the following report on the survey of the Township of Parkinson, in the district of Algoma :—

Having reached the landing at the mouth of Blind River, by steamer, I proceeded with canoes up the "Mississauga" as far as the second falls, about fifteen miles from its mouth. From this place I had to pack my supplies and outfit, about four miles north to reach the south boundary of the township.

I commenced the survey by starting from the post at the north-west angle of the township of Patton, and working northerly and westerly, completing about two thirds of the distance from east to west, as we moved north and the balance as we returned south.

With regard to the agricultural capabilities of this township, I am compelled to report very unfavourably, not more than ten per cent. of its area being in my estimation of it for settlement. Its general character is that of a rocky mountainous district with no well defined outline to the hills, but broken up into an almost endless variety of bluffs. Near the south boundary are a few lots of good land, but unless the adjacent portion of the Township of Gladstone is also good, I fear there would not be a sufficient area on which to form a settlement.

Regarding timber there is a considerable quantity of hardwood, principally maple, on the high land, but following the general character of the district, the land on which it

grows is almost invariably stony. Occasional white pine trees are met with, scattered here and there throughout a considerable portion of the township, but nowhere except perhaps, at the south-west corner of the township in sufficient quantities to attract the lumbermen.

I found several indications of mineral deposits. Specular iron ore seeming to predominate.

Fish are numerous in Lakes Cleland and Constance, but no brook trout were met with in the streams. The only stream of any size flowing through the township is the Little White River. It is navigable for canoes, though in many places the water is very shallow, and rapids are numerous. On the left bank of this stream in this township a few miles of open prairie are met with, but here unfortunately, the soil is worthless, being a very light sand of inferior quality.

I have the honour to be, Sir,
Your obedient servant,
E. STEWART,
Provincial Land Surveyor.

The Honourable T. B. PARDEE,
Commissioner of Crown Lands,
Toronto.

Appendix No. 32.

TOWNSHIP OF WELLS.

BELLEVILLE, ONTARIO, November 21st, 1879.

SIR,—I have the honour to report that, in accordance with my instructions bearing date the 23rd of June, 1879, I have completed the survey of the Township of Wells, in the District of Algoma.

I proceeded to the township *via* Collingwood, where I procured my supplies and employed most of my party. I here took the steamboat to Blind River Mills, and then having purchased canoes, I proceeded up the Mississauga River, which took me to the south-east angle of the township of Wells.

As instructed, I had previously communicated with Messrs. Stewart and Abrey about running the south boundary of Wells and Parkinson, which you desired should be one continuous line, and I had made an arrangement that Mr. Abrey should run all the boundary line between Day and Wells and meet Mr. Stewart's line at the South-west angle of Parkinson, while I should run all the boundary line between Wells and Parkinson. I, therefore, found all my south boundary already run by Mr. Abrey, and the south-west angle of Parkinson (being the south-east angle of Wells) actually determined. In consequence of this I commenced work here instead of at the south-west angle as directed in my written instructions.

I took an observation of Polaris here, and starting from the post planted by Mr. Stewart for the south-west angle of Parkinson, I ran the line between Wells and Parkinson due north six miles, to intersect the north boundary of Parkinson.

At every 80 chains, on this line, I commenced the concession lines, which I ran due west to intersect the eastern boundary of Bridgland. I ran my north boundary on such a bearing as to strike the north-east angle of Bridgland. As will be seen on the accompanying plan, the side lines I ran all due north.

The River Mississauga flows through the township, entering it on Lot 7, in the 6th Concession, and leaving it near the south-east corner. In its course through this township, the river averages from 200 to 250 feet in width, and is generally shallow, in some places less than a foot in depth, while in others the water is five and six feet deep.

The shallow places are generally caused by gravel and sand bars, and the current is usually swift and strong, but where the water is deep the current is very gentle. There

are no rapids on the river from the south boundary up to where the line between Lots 4 and 5 crosses it on Concession 6. From the north boundary down to this point the river flows through a chasm in a high mountain range, which traverses the northern portion of the township; through this gorge, for over a mile, the stream is a succession of cascades and rapids, and the banks on each side are steep and precipitous in the extreme.

I saw only four small lakes in the township and there are no important streams except the Mississauga.

The land in this township will I think compare favourably with any of the surrounding townships in this section of the country there being large tracts of hardwood among which can be found some very fair farms, and along the river there are some excellent flats of good land.

Towards the south-east corner is a tract of country bearing a considerable quantity of small sized white pine timber of very fair quality mixed with balsam and birch. Through this section the soil is light and gravelly.

Traversing the south-west corner there is a tract of about 2,000 acres of rocky barren country, covered with small scrubby timber. This section is good for nothing.

A large hardwood tract comes in to the west of the pinery and north of the rocky belt, and sweeps towards the north and west, and embraces some twelve or fifteen thousand acres; a great deal of this hardwood tract is very stony, but the soil is an excellent sandy loam.

Towards the north of the township the timber is generally of a mixed character, consisting chiefly of balsam, spruce, birch, poplar, &c.,

A most remarkable feature in this section of the township is a large open plain or prairie embracing about 2,000 acres. On this plain there are occasional clumps of spruce, pitch pine and poplar, but in places it is like an open field. The soil on this plain is generally gravelly, but in some places it is a very good yellow loam.

To the north of this plain the mountain ranges occur through which the Mississauga cleaves its course and these ranges form a very marked feature in the northern portion of the township. There are some very high hills in this township, but it is not so generally mountainous as most of the adjoining townships. I think on the whole that from 40 to 50 per cent. of the land is fit for settlement, but at present there is no way for intending settlers to get in except by the river.

If a road were built to connect this section of the country with the Thessalon settlements and Bruce Mines, I have no doubt but that a good settlement could be formed there.

The rocks appear to be the slate rock and quartzites of the Huronian formation while in some sections the Laurentian gneiss predominates. I saw some indications of copper, but did not make any particular examinations. There appears to be iron present towards the north-east corner of the township, judging from the disturbance of the magnetic needle.

I do not think that there are any fish in the river in this township as the falls in the township of Gladstone stop them from coming up. I had no means of ascertaining whether there were any in the small lakes.

There appears to be a good many beaver on the small streams throughout the township, but other fur bearing animals appear scarce. Moose-tracks are occasionally seen, but I do not think moose are very plentiful. I saw no signs of the common deer.

I have the honour to be, Sir,
Your obedient servant,

THOMAS O. BOLGER,
Provincial Land Surveyor.

The Honourable T. B. PARDEE,
Commissioner of Crown Lands,
Toronto.

Appendix No. 33.

TOWNSHIP OF DAY.

LITTLE CURRENT, ONTARIO,
October, 15th, 1879.

SIR,—In compliance with instructions from the Honourable the Commissioner of Crown Lands, for Ontario, dated at Toronto, the 14th day of June last, I sub-divided the Township of Day into farm lots, and beg to forward herewith copies of field notes, inspection report, and plan of the survey of the same, and to report as follows:

I proceeded to the locality by way of Mississauga River, with an open sail boat, going up the river with the same, some 15 miles, to the second considerable rapids. I there abandoned the sail boat and took to canoes, continuing up the river some three-fourths of a mile farther, to the portage crossing over to the most easterly end of Lake Waquekobing, thence portaged to the lake, and thence with canoes to the westerly side of the township of Day, to commence work.

I commenced the survey by tracing the eastern boundary of Kirkwood southerly, from the shore of Lake Waquekobing to the limit of Cons. 4 and 5, of Kirkwood, making this point also the starting point for Day, and ran due east from this point, planting posts at every 40 chains, marking the angles of the lots along the front of the 5th Concession of Day. Thence by lines north and south, and east and west, I sub-divided into blocks of one mile square.

The boundary lines of Kirkwood, Thessalon, Gladstone and Parkinson were already run, and these were adhered to as boundaries of Day. I ran the boundary between Day and Bright additional, due west from the south-west angle of Gladstone to Thessalon and the boundary between Day and Wells, due east from the north east angle of Kirkwood to side line between lots 6 and 7. Thence I ran south $84\frac{3}{4}^{\circ}$ east, to intersect with the south-west angle of Parkinson.

The running of this northern boundary of Day was delayed till the last, hoping that the surveyors of the adjacent townships would fix the point at its eastern end, and thus enable me to make it a straight line. Disappointed in this, I ran east as mentioned, till the eastern end was fixed, and connected with a straight line.

The instruments used were the same as those used and described last year, the principal ones being a solar compass and a solar transit. All lines and observations were run or made with one of these.

The township has a very large portion of its surface covered with lakes, more than a third of the area being water. The lakes all afford abundance of good fish, and will give good access for settlement prior to the construction of roads.

The surveys of the lakes were entirely made by triangulation, the whole being based on that independently made for the concession and side lines of the township.

All posts, not otherwise described in the field notes, are composed of cedar, all well secured in the ground, and properly marked with a scribe.

All that portion of the township south of Lake Waquekobing, is well adapted for settlement, excepting a narrow strip bordering that lake. No better agricultural land exists than a large portion of this described belt. North of that lake is much broken with rocks. Some 5 or 6 lots only, in the north-eastern portion, near the Mississauga River, are of fair quality.

The projected Georgian Bay branch of the Canada Pacific Railway, traverses entirely across this township, between the lakes. The liberal grants recently expended on colonization roads in Algoma, have made access to the western side of the township, from the port of Thessalon, easy. The settlers have already extended these nearly a mile into Day.

No portion of the township has been injured by recent fires except in one or two places along the boundary of Thessalon, where some little timber has been destroyed.

The timber, as is the rule in this country, is generally composed principally of maple. Some considerable swamps were met with in the southern part of the township. Some

good pines were seen in the north-easterly section, but not of sufficient extent to make it desirable for any reservations.

A good water-power exists on Lot 3, in the Second Concession, on the outlet of Lake Waquekobing, and ought to be reserved. Of course, a large amount of water-power exists on the various falls of the Missisagua River, but is not very available for the immediate requirements of the pioneer settler.

No economic minerals were discovered anywhere. In a few places, principally on the shores of the large lake, considerable local magnetic attraction was observed. Some copper mines have been opened up and abandoned near the eastern boundary of Day, in Gladstone. A location comprising one of these copper mines extends into Day from Gladstone, as shown on plan of the township. None of its boundaries were observed in running the lines in Day, and being unaware of its existence no special search was made to discover any. After coming home, P. L. S. Butler, in surveying the adjoining township traced out the location lying partly in Gladstone and partly in Day, and kindly forwarded me the field notes of his survey of the portion in Day. These have been inserted in the accompanying field notes and the plan constructed accordingly.

Already, prior to the survey, or during its progress, nearly the whole of the township south of Lake Waquekobing has been squatted upon by what would appear to be actual *bona fide* settlers. The improvements made by these, with such other information concerning the same as could be obtained, will be found detailed in the field notes and inspection report accompanying this report.

I have the honour to be, Sir.

Your obedient servant,

G. BROCKITT ABREY,

Provincial Land Surveyor.

The Honourable T. B. PARDEE,

Commissioner of Crown Lands,
Toronto.

Can. Gov. Doe.

[SHELVED IN ~~FILE~~]

3 1761 11547002 3

